



COUNCIL INFORMATION PACKET

Council Meeting

Monday

April 15, 2024

6:00 p.m. MDT

TOWN OF COLORADO CITY

MEETING NOTICE

Pursuant to A.R.S. § 38-431.02, notice is hereby given to the members of the Colorado City Town Council and to the general public that the Town Council will hold a meeting open to the public on **Monday April 15, 2024**, at 6:00 p.m. at the **Colorado City Town Hall, 25 South Central Street**, Colorado City, Arizona.

AGENDA:

1. Call to Order
2. Roll Call
3. Pledge of Allegiance
4. Council Declaration of any Conflicts of Interest
5. Minutes of Previous Meeting(s)
6. Public Comments
7. Town Manager & Department Reports to the Council
8. Consider Resolution Adopting Culinary Water Development Fees
9. Consider StarLight Cliffs Preliminary Plat
10. Consider Short Creek Subdivision Block 21 Amended Final Plat
11. Ratify Appointment to Airport Advisory Board
12. Consider Flood Control IGA with Mohave County Flood Control District
13. Ratify Financing of Garbage Collection Truck with Western Equipment Financing
14. Consider Purchase of Replacement Vehicle for Wrecked Police Vehicle
15. Consider Resolution Adopting Updated Vision, Mission and Goals Statement
16. Consider Resolution Adopting a Town Flag
17. Executive Session for Discussion and Consultation with Legal Counsel for Legal Advice in Accordance with A.R.S. 38-431.03(A)(3)&(4).
18. Budget Report and Order to Pay Due Claims
19. Council Comments
20. Adjournment

Agenda items and any variables thereto are set for consideration, discussion, approval or other action. All items are set for possible action. The Town Council may, by motion, recess into executive session, which will not be open to the public, to receive legal advice from the Town's attorney(s) on any item contained in this agenda pursuant to ARS § 38-431.03 (A) (3)(4), or regarding sensitive personnel issues pursuant to ARS § 38-431.03 (A) (1), or concerning negotiations for the purchase, sale or lease of real property; ARS § 38-431.03 (A) (7). One or more Council members may be attending by telephone. Agenda may be subject to change up to 24 hours prior to the meeting. Persons with a disability may request a reasonable accommodation by contacting the Town Clerk at 928.875.2646 as early as possible to allow sufficient time to arrange for the necessary accommodations. Town of Colorado City Council Meeting Agenda.



**Town of Colorado City
COUNCIL MEETING AGENDA
STAFF SUMMARY REPORT
Monday April 15, 2024**

6:00 p.m.

4. Council Declaration of Conflicts of Interest

This is the time for any members of the Town Council to declare if they have a conflict of interest with any items that are set for possible action on the agenda.

5. Minutes of prior meetings

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Presented are the minutes of the March 11, 2024, meeting and March 14, 2024, Work Session that both need to be reviewed and approved by the Council.

RECOMMENDATION Motion: _____ 2nd: _____ Vote: ___ / ___

Motion to approve the minutes of the March 11, 2024, meeting and March 14, 2024, Work Session meeting.

6. Public Comment

The chairperson of the meeting should outline the rules of public comment and the time limit imposed according to the following guidelines:

Anyone from the public is invited to make a comment at this time. Please step up to the podium and state your name for the record. There is a standard time limit of three minutes per person. Although we welcome and invite your comments, no discussion or response from the Council is required and individuals should not anticipate any.

According to Arizona law (A.R.S. § 38-431.01(H) the only action that may be taken as a result of public comment will be limited to directing staff to study the matter or scheduling the matter for further consideration and decision at a later date.

7. TOWN MANAGER & DEPARTMENT REPORTS

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1. Airport Manager & Advisory Committee – LaDell Bistline Sr.
2. Building Department-- Andrew Barlow
3. Police Department/ Dispatch – Robb Radley
4. Public Works/ Landfill– John T. Barlow
5. Utility Department – Jerry Postema
6. Administration Department – Vance Barlow
7. Magistrate Court -- Barbara Brown

Department reports should be treated like public comment and limited to clarifying questions directing staff to study the matter or scheduling the matter for further consideration and possible action at a later date.

**8. Consider Resolution Adopting Culinary Water Development Fees.
Presenter: Vance Barlow**

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On January 8, 2024, a public hearing was held for the Colorado City land use assumptions and infrastructure improvements plan. This public hearing had to be held at least 30 days prior to action by the Town Council. At the February 12, 2024, Council meeting the Town Council adopted the land use assumptions and infrastructure improvements plan and set a public hearing on the development fees for Thursday March 14, 2024. The public hearing was held on Thursday March 14, 2024, and the development fees are now presented for Council action.

The development fees will go into effect 75 days after adoption which will be June 28, 2024.

RECOMMENDATION **Motion:** _____ **2nd:** _____ **Vote:** ___ / ___

Motion to adopt Resolution 2024-09 adopting the culinary water development fees for the Town of Colorado City.

**9. Consider StarLight Cliffs Preliminary Plat
Presenter: Vance Barlow, Town Manager**

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Presented here is the preliminary plat for StarLight Cliffs Subdivision, a mixed development of 11 Townhomes and 4 single family residential subdivision located on the Southwest corner of Township Avenue and Hildale Street.

The Town Council approved the zoning to an R2 Residential at the May 15, 2023, Council meeting.

This project has been to the Planning Commission three times and was last considered at the March 4, 2024, Planning Commission meeting and brought forward with a split vote of 2 to 2 to recommend Town Council approval. There was considerable discussion at the Planning Commission on the need for better department reviews, etc.

After the vote Planning Commission Chair Charles Hammon expressed his desire to see the project move forward and his hope that the Town Council would approve the preliminary plat for the development.

The developers and their engineer have been working closely with the staff on the final reviews in preparation of Town Council action.

The developer is requesting the following variances on the preliminary plat:

- Waiving the traffic study due to the size of the development and size of existing streets. Staff recommends approval.
- To have a 35 ft private street with sidewalk on one side as shown on the plat. This is compliant with APWA for a small development road and staff recommends approval.
- Geotechnical Investigation Report, still in process and to be completed prior to beginning construction. Staff recommends approval.
- Waive landscape requirements within the planter strips. Staff recommends approval.

After the preliminary plat is approved the developer will complete construction drawings that will be reviewed by staff prior to construction. After the construction is completed, the

developer will submit a final plat with as built for final approval and recording.

Staff recommends that the Town Council approve the preliminary plat for StarLight Cliffs Subdivision.

RECOMMENDATION **Motion:**_____ **2nd:**_____ **Vote:**___/___

Motion to approve the preliminary plat for StarLight Cliffs Subdivision with the variances outlined in the comments.

10. Short Creek Subdivision Block 21 Amended Final Plat

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An application for final subdivision plat approval for the Short Creek Subdivision Block 21 Amended has been received by the Town.

The application and accompanying documents have been reviewed by staff and all elements of the application have been met with the exception of the title report which is in process.

Included in the packet is the subdivision plat, and engineering review of the application. The Towns staff has inspected the project and stated that it was completed and ready for final approval.

RECOMMENDATION **Motion:**_____ **2nd:**_____ **Vote:**___/___

Motion to approve the final plat for Short Creek Subdivision Block 21 Amended and authorize its recording upon final receipt of the title report.

11. Ratify Appointment to the Town of Colorado City Municipal Airport Advisory Board.

Presenter: Mayor Ream

Paul Black has submitted his resignation from the Colorado City Municipal Airport Advisory Board.

The Town posted a notice of opportunity to serve on the Board and three applications were received and considered.

The Mayor has appointed Fredrick Zitting to fill out the balance of Paul Black's term ending December 31, 2025.

With this appointment the committee will consist of:

Jacob Jessop & Fredrick Zitting	December 31, 2025
Darlene Stubbs	December 31, 2027
Steven Black & Jared Zitting	December 31, 2029

RECOMMENDATION **Motion:**_____ **2nd:**_____ **Vote:**___/___

Motion to ratify the appointment of Fredrick Zitting to the Town of Colorado City Municipal Airport Advisory Committee with term ending December 31, 2025.

12. Consider Resolution Entering into Flood Control IGA with Mohave County

Presenter: Vance Barlow, Town Manager

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This is an annual process to obtain the Town's share of the funds collected by the Mohave County Flood Control District for use in flood control projects. The IGA will provide the Town with \$24,548.

The IGA exhibit "A" identifies the funds will be used for grade control structure work on the Township crossing, this is a critical infrastructure that is needed to help preserve the vital crossing at Richard Street.

Historically the flood control funding has been used for engineering and materials such as concrete and/or asphalt, with the Town contributing the dirt work, road-base, grading, etc., to get the projects completed.

The proposed Flood Control IGA has being reviewed by the Town Attorney with no issues.

RECOMMENDATION **Motion:** _____ **2nd:** _____ **Vote:** ___ / ___

Motion to adopt Resolution 2024-10 authorizing the Mayor to execute the Flood Control IGA with Mohave County Flood Control District.

13. Ratify Financing of Garbage Collection Truck with Western Equipment Financing
Presenter: Vance Barlow, Town Manager **Page 160**

The Landfill Board approved the purchase of a new front loader garbage truck in February 2023. After getting quotes and waiting for the truck build, the Town took possession of the truck on April 5, 2024.

As financing options were being researched it was decided to do the financing through the Town and have the truck titled in the name of the Town.

Financing, in the amount of \$420,777.70 on a five-year capital lease, was secured through Western Equipment Financing and the documents were signed and completed so the Town could take possession of the Truck and put it to work.

The payments will be made from the Landfill operations.

Because the financing is in the name of the Town, we are requesting the Town Council to ratify the financing.

RECOMMENDATION **Motion:** _____ **2nd:** _____ **Vote:** ___ / ___

Motion to ratify the financing a replacement garbage truck with Western Equipment Finance in the amount of \$420,777.70.

14. Consider Purchase of Replacement Vehicle for Wrecked Police Vehicle
Presenter: Vance Barlow, Town Manager **Page 169**

On April 3, 2024, the police vehicle used by Chief Radley was involved in a motor vehicle accident that resulted in total loss of the vehicle.

The Town has sought pricing for a replacement vehicle and is requesting the Town Council approval the purchase a new pickup from Murray Motors in the amount of \$56,200 plus taxes and fees.

It appears that we will be able salvage most of the equipment from the wrecked vehicle and have it installed in the new vehicle.

RECOMMENDATION **Motion:**_____ **2nd:**_____ **Vote:**___/___

Motion to authorize the purchase of a replacement police vehicle from Murray Motors in the amount of \$56,200 plus any taxes and fees.

15. Consider Resolution No. 2024-12 Adopting Updated Vision, Mission and Goals Statement **Page 172**

Presenter: Vance Barlow, Town Manager

The current Vision & Mission statement was adopted by the Town Council in March 2017.

There have been considerable changes in the community and demographics of the community.

On March 14, 2024, there was a discussion in the Work Session about the changes the Council would like to see to the Vision, Mission and Goals Statement.

RECOMMENDATION **Motion:**_____ **2nd:**_____ **Vote:**___/___

Motion to adopt Resolution No. 2024-12 adopting changes to Resolution 2017-03 Vision, Mission, and Goals Statement.

16. Consider Resolution 2024-13 Adopting a Town Flag **Page 174**

Presenter: Vance Barlow, Town Manager

There have been discussions on having the Town participate in the Parade of Flags at the annual League of Cities and Towns Conference.

That gave an opportunity for the Council to give the staff directions on designing a flag that will be considered for adoption at a future meeting.

On March 14, 2024, these various Flag options were presented to the Mayor and Council in the Work Session. Option #2 held the most popular vote by the Mayor and Council.

RECOMMENDATION **Motion:**_____ **2nd:**_____ **Vote:**___/___

Motion to adopt Resolution 2024-13 Adopting a Town Flag with Option #2 as the image.

17. Executive Session for Discussion and Consultation with Legal Counsel for Legal Advice in Accordance with A.R.S. 38-431.03(A)(3)&(4).

This item will need to be discussed in executive session with legal counsel.

RECOMMENDATION **Motion:**_____ **2nd:**_____ **Vote:**___/___

Motion to go into executive session for discussion and consultation with legal counsel for legal advice in accordance with A.R.S. 38-431.03(A)(3)&(4).

18. Budget Report and Order to Pay Due Claims **Page 176**
Presenter: Vance Barlow, Town Manager

The Budget Report and Payment Approval Report is presented for review and approval.

RECOMMENDATION **Motion:** _____ **2nd:** _____ **Vote:** ___/___
Motion to pay the due claims as they become due.

19. Council Comments

This time is for any Council Member to bring up other items for awareness. The Council will not be able to take action on items brought up at this time. The Council can direct staff to do additional research on matters and/or schedule them for action on a future agenda.

Per State Statute (A.R.S §38-431.02(K)(2) The public body does not propose, discuss, deliberate or take legal action at that meeting on any matter in the summary unless the specific matter is properly noticed for legal action.

20. Adjournment

**SUMMARIZED MINUTES OF THE TOWN OF COLORADO CITY COUNCIL MEETING
HELD MONDAY, MARCH 11, 2024, AT 25 S CENTRAL STREET, COLORADO CITY,
ARIZONA**

The meeting was called to order at 6:00 p.m. by Mayor Howard Ream.

Roll call showed present: Mayor Howard Ream, Vice Mayor Dalton Barlow, and Council Members: John Chatwin, Jerusha Darger, Alma Hammon, Thomas Holm, and Nathan Burnham.

The Pledge of Allegiance was led by Council Member Jerusha Darger.

MINUTES OF PRIOR MEETINGS

The minutes of the February 12, 2024, meeting, and March 4, 2024, special meeting was presented, and no corrections were made.

A motion was made by Council Member Alma Hammon to approve the minutes of the February 12, 2024, meeting, and March 4, 2024, special meeting. There was a second from Council Member Nathan Burnham, and all voted in favor.

PUBLIC COMMENT/INFORMATIONAL SUMMARIES

No public comment

DEPARTMENT REPORTS

The department reports were in the information packet.

Airport

Building

Police

Public works

Utilities

Town Manager

Magistrate Court

Vance Barlow answered questions and clarified the department reports.

Judge Barbara Brown answered questions and clarified the magistrate court report.

Consider Resolution Proclaiming April as Fair Housing Month to Encourage Equal Housing Access as a Fundamental Human Right for all Americans.

April is National Fair Housing month, and the Town would like to sponsor a proclamation declaring fair housing month which urges fair housing. This is an affirmative step to further fair housing and Annual fair housing training is given to Town staff during the month of April.

It is unlawful for any person to discriminate in connection with housing because of race, color, religion, gender, national origin, familial status, or disability.

A motion to adopt Resolution 2024-06 proclaiming fair housing month was made by Council Member Nathan Burnham and seconded by Council Member John Chatwin. All voted in favor.

Consider Resolution Sponsoring Spring Clean Up Week April 1st through April 5th and Encouraging all Citizens to Join in a Community-Wide Clean-Up Around Their Homes and Businesses

The Town has sponsored a community spring clean-up event in years past and would like to do so again to improve the community and assist low-to-moderate-income families.

The clean-up event will be for one week beginning Monday, April 1st and ending on Friday April 5th, 2024.

The Town will place roll-off dumpsters, free of charge to deposit refuse in. They will be located at the City Offices of both Colorado City & Hildale.

Town residents can also haul covered and secured loads of household refuse to the Landfill (during regular Landfill hours) during this time period free of charge if they have proof of residency, such as a utility bill.

A motion to adopt Resolution 2024-07 sponsoring community spring clean-up event and encouraging citizens to improve surroundings and clean up along the streets in their neighborhoods was made by Mayor Howard Ream with the modification of dates starting March 30th ending April 6th for both the roll-off dumpsters and the Landfill hours to include two Saturdays. There was a second from Council Member Nathan Burnham, all voted in favor.

Consider Zoning Map Amendment -- Parcel 404-53-487 from RE-1A Residential Estate to R1-12 Single Family Residential

The Planning Commission considered the request for zoning map amendment by Bud Cooke at the March 4, 2024, Planning Commission meeting and unanimously recommended approval by the Town Council.

The developer's intent of this rezone is to develop an additional lot for single family residential.

A motion to adopt Ordinance 2024-08 approving rezoning Parcel 404-53-487 from RE-1A Residential Estate to R1-12 Single Family Residential was made by Council Member Alma Hammon and seconded by Council Member Jerusha Darger. All voted in favor.

Consider Zoning Map Amendment – Parcel 404-53-262 from RE-1A Residential Estate to R1-20 Single Family Residential

The Planning Commission considered this request for zoning map amendment by Thomas Holm at the March 4, 2024, Planning Commission meeting and unanimously recommended approval by the Town Council.

The developer's intent of this rezone is to develop an additional lot for single family residential.

A motion to adopt Ordinance 2024-09 approving rezoning Parcel 404-53-262 from RE-1A Residential Estate to R1-20 Single Family Residential was made by Council Member John Chatwin and seconded by Council Member Dalton Barlow. All voted in favor except Council Member Thomas Holm who abstained.

Consider Contract with Energy Services, LLC for Drilling Wells No. 25 &26

On March 4, 2024, the Town Council awarded the bid for drilling wells No 25 & No. 26 to Energy Services, LLC. Presented was the Construction Contract between the Town and Energy Services, LLC to perform the work.

This is a project funded as an ARPA subrecipient grant from Mohave County.

The contract has been sent to the Town's attorney for legal review.

A motion to approve the Contract to Energy Services, LLC for Drilling Wells No. 25 and No. 26 pending final legal review was made by Council Member Nathan Burnham and seconded by Council Member Jerusha Darger. All voted in favor.

Second Reading, by Title Only, of Ordinance 2024-07 adopting amendments to the Town Code Title XV Chapter 152 Zoning Code

To be read by the Town Clerk Shirley Zitting Ordinance 2024-07 by title only. Ordinance 2024-07 was declared a public record and had a first reading by title only at the February 12, 2024, meeting.

Ordinance 2024-07 which will reduce the frontage required in an R1-8 single family residential zone from 70 feet to 55 feet is presented for a second reading by title only in the adoption process.

The ordinance was presented for a second reading in the adoption process.

Council Member John Chatwin asked for clarification if we are adopting the Title only or the Ordinance.

A motion to read, by title only, Ordinance 2024-07 adopting amendments to the Town Code Title XV Chapter 152 Zoning Code as a second reading in the adoption process was made by Council Member Alma Hammon and seconded by Council Member Jerusha Darger. All voted in favor.

Consider Adoption of Ordinance 2024-07 adopting amendments to the Town Code Title XV Chapter 152 Zoning Code

Now that the second reading, by title only, of Ordinance 2024-07 was completed, consider adopting amendments to the Town Code Title XV Chapter 152 Zoning Code, the Town Council will need to make a formal motion to adopt Ordinance 2024-07.

Ordinance 2024-07 will reduce the frontage required in an R1-8 single family residential zone from 70 feet to 55 feet.

The effective date of the changes will be thirty days after adoption, which will be April 11, 2024.

The proposed ordinance has been reviewed by the Towns legal counsel with no concerns noted.

A motion to adopt Ordinance 2024-07 approving the amendments to the Town Code Title XV Chapter 152 Zoning Code was made by Council Member John Chatwin and seconded by Council Member Nathan Burnham. All voted in favor.

Consider Adopting Resolution 2024-08 HCC Utility Department Classifications & Steps

The Utility Department staff have developed a classification & steps pay scale for the utility department.

The proposed scale has been vetted by staff and reviewed by the Utility Advisory Board at their January 25, 2024, meeting with a recommendation to approve the pay scale.

By adopting and setting a classification and step matrix it minimizes the subjectivity in determining payrates and provides a road map for employees to move up in the scale.

Mayor Howard Ream asked if this was similar to a merit-based pay scale.

Town Manager Vance Barlow responded that it is similar and based on tenure and certifications.

A motion to adopt Resolution 2024-08 adopting the HCC Utility Department Classifications & Steps was made by Council Member Alma Hammon and seconded by Council Member John Chatwin. All voted in favor.

THERE WAS NOT AN EXECUTIVE SESSION AT THIS MEETING

BUDGET REPORT AND ORDER TO PAY DUE CLAIMS

The Council reviewed the budget report and a detailed report of the due claims.

A motion to accept the budget report and order to pay due claims was made by Council Member Nathan Burnham and seconded by Council Member Jerusha Darger. All voted in favor.

COUNCIL COMMENTS

Council member Nathan Burnham asked about implementing a regular schedule for road maintenance.

Mayor Howard Ream thanked Public Works for their detailed report and for all the work they do for the city.

Council member Alma Hammon thanked the Police Department for getting the travel trailer on Central St removed.

Council member Thomas Holm stated that Academy Crossing looks great but inquired about getting the abandoned cars removed.

Council Member John Chatwin asked about Christmas lighting for the town. Mayor Howard Ream replied that it will be part of the discussion in the work session on March 14, 2024.

Council Member John Chatwin inquired about doing fundraisers for the Police Department to increase their budget.

ADJOURNMENT 7:04 p.m.

CERTIFICATION

I hereby certify that the foregoing minutes are a true and correct copy of the minutes of the meeting of the Town Council of Colorado City held on the 11th day of March 2024. I further certify that the meeting was duly called and held and that a quorum was present.

Dated this 15th day of April 2024

Town Clerk

SUMMARIZED MINUTES OF THE TOWN OF COLORADO CITY PUBLIC HEARING AND CITY COUNCIL WORK SESSION HELD MONDAY, MARCH 14, 2024, AT 25 S CENTRAL STREET, COLORADO CITY, ARIZONA

The meeting was called to order at 6:00 p.m. by Mayor Howard Ream.

Roll call showed present: Mayor Howard Ream, Vice Mayor Dalton Barlow, and Council Members: John Chatwin, Jerusha Darger, Alma Hammon, Thomas Holm, and Nathan Burnham.

The Pledge of Allegiance was led by John Chatwin.

PUBLIC HEARING: for Town of Colorado City Culinary Water Development Fees

ARS 9-463.05 requires a public hearing at least 30 days after the adoption of the land use assumptions and infrastructure improvements plan and at least 30 days prior to adoption of the development fees.

The land use assumptions and infrastructure improvements plan were reviewed by the Town Council at a work session held October 30, 2023. A public hearing was held on January 8, 2024, for the land use assumptions and infrastructure improvements plan. The plan was adopted on February 12, 2024, and a public hearing for the development fees was approved and posted for March 14, 2024, at 6:00 p.m. MDT.

Included in the packet is the infrastructure improvements plan, the summary and recommendation from the infrastructure improvements advisory committee which were received on Friday December 29, 2023.

No action was taken on the matter. Action is scheduled for the April 15, 2024, Town Council meeting.

There were no public comments.

The Public Hearing was closed at 6:06 p.m. and the Town Council Work Session was reconvened at 6:14 p.m.

Discussion on Mission and Vision Statements for the Town

There was discussion on the current Vision & Mission statement that was adopted by the Town Council in March 2017.

There have been considerable changes in the community and demographics of the community and the council members discussed streamlining the wordage and updating the verbiage to be less dated.

Some suggestions that were made:

Council Member Thomas Holm would like to replace the text happiness with prosperity.

Council Member John Chatwin would like to remove Short Creek's pioneer from the mission statement and add in industry.

Council Member Jerusha Darger would like to shorten morally healthy to healthy.

With these suggestions the administrative staff will update the Town's mission and vision statements for presentation and approval at a later council meeting.

Discussion on Town Flag Design

There was discussion on having the Town participate in the Parade of Flags at the annual League of Cities and Towns Conference and creating a flag for the Town.

Council Member John Chatwin liked the design of #4 and #2.

Council Member Jerusha Darger, Dalton Barlow, and Mayor Howard Ream liked the design of #2.

Overall, the council was in favor of design #2 with possibly a darker blue.

Attendance at the League of Cities & Towns Conference

The League Annual Conference is scheduled for Tuesday August 27 through Friday August 30, 2024, at the Arizona Biltmore in Phoenix, AZ.

To budget for and make reservations in a timely manner staff requested that all council members who are planning to attend the League Conference let us know and if they are planning on bringing a guest.

Council Members John Chatwin, Dalton Barlow, Nathan Burnham, Jerusha Darger, and the Mayor Howard Ream all voiced they would like to attend.

Discussion on Major Future Projects

- a. Annexation -- 2024
- b. Airport Improvements – 2024 Taxiway & Hanger infrastructure
- c. Entertainment District
- d. Light Poles & Jacks Across Street
- e. EV Charging Stations

These are some of the large items and conceptual items that were discussed by the Town Council.

Annexation: A concept for annexation to west and south is being considered to move the process forward will require a commitment of funds for engineering and

considerable work to contact the landowners and go through the various steps. The Council discussed if they felt that this is a process they want to pursue.

The Town Council discussed various advantages and disadvantages.

Overall, the Town Council agreed that annexation would give the Town more abilities to support future growth and infrastructure.

The Mayor and staff will begin the process and keep the Town Council informed as the process proceeds.

Airport Improvements: This coming fiscal year will require a significant investment in the Colorado City Municipal Airport.

Taxiway: The Town's required match for the west taxiway is estimated to be \$154,000 and there is a possibility that the Town may need to pay an additional \$90,000 due to some FAA interpretations. The engineers from Woolpert are currently working with the FAA to address their concerns. We feel that it is important to have the project move forward as designed even if the Town must pay a bit more. It is also imperative that the Town take advantage of the FAA providing the funding to install the taxiways as it will be many years before they will be willing to provide more than the entitlement funding.

Hanger Infrastructure: there are six or seven box hanger sites ready to lease, all of these have had people interested in leasing the sites and building a box hanger. The Town has spent several years getting the layout and environment reviews completed and approved by the FAA. As the developer the Town will need to invest an estimated \$75,000 to \$100,000 to put in underground infrastructure. We feel that with this investment the Airport will be set for several years before the Town will need to invest in additional growth.

The Town Council discussed some concerns about not having enough funding for the Streets and Roads Department but overall agreed in moving forward with the work on the airport.

Entertainment District: The Town Council discussed creating an entertainment district in the center of the Town. Discussion included the size of the district, and possibilities for future establishments.

Overall, the Town Council would like to pursue this plan and the staff will bring some proposals to future meetings for Town Council action.

Light Poles and Jacks Across Streets: Some Town Council members have suggested that poles be placed where seasonal banners can be displayed across the roadway. The Town Council discussed where they would like the banners to start and end.

Mayor Howard Ream suggested that Edson St. would be a good stopping point.

Overall, the Town Council would like to pursue the light poles and banners. The Staff will proceed with engineering and cost estimates for the project.

EV Charging Stations: Currently there are few if any EV charging stations in the Town and it has been proposed that the Town seek some grant funding to install some charging stations in the central part of the Town.

The Town Council discussed that they would like to see this concept pursued and that all three of these items could work together to bring more life to the downtown area and revenue to the Town.

The staff will research grant options and study locations to have the best effect for the downtown businesses.

Discussion on Rural Development Grant for Colorado City Flood Control Project

A year ago, the Mayor and staff were approached by Senator Kelly's office about applying for some congressionally designated funding.

In studying the options, it became apparent that the Town would not qualify for the storm water and flood control funding for the Short Creek Wash without having first applied for and received a planning grant with a maximum amount of \$55,000. The grant was applied for, and the Town just recently received confirmation that the funding had been approved. The funding will be used to do planning for future projects to mitigate storm water and flood damage in the Short Creek Wash.

The Town Council agreed this was a good start.

Discussion on Short Creek Wash Crossings

As part of the long-range planning the Town Council discussed the various crossings of the Short Creek Wash.

Discussion included:

Redwood Road: This road on the west side of SR389 needs to become part of the Town's long range plans as it will need to have a bridge structure to facilitate traffic flows as well as carrying Utility and data lines across the Creek.

Township Avenue: The Town has recently acquired the land which will enable the Town to develop the Creek crossing to connect Township Avenue from Richard Street to Homestead Avenue. This will be an expensive and complex project as it will need to incorporate the flood waters from Willow Street as well as be an all-weather crossing.

There is an immediate need to install some sort of grade control structure in the Township ROW to prevent further erosion of the creek bed and preserve the crossing structure at Richard Street.

Richard Street: The crossing at Richard Street has received some significant damage from some of the large floods during the past few years. The damage has been

exacerbated by the dropping of the creek level due to the flood control structure west of SR389 being destroyed in the flood of 2015. ADOT has not been willing to address the issue and it does not appear that ADOT is willing to partner in mitigating the issue.

Staff have been assessing the damage and will be bringing some proposals for repair and mitigation as they get engineered and developed.

Central Street: The existing low flow crossing is holding well; however, this crossing needs to be converted to an all-weather crossing as it would be the most cost effective and provide the best north south access across Short Creek Wash for emergency services during a flooding event. Mohave County Flood Control District has applied for a FEMA grant to put an all-weather crossing at Central Street, the grant is still in process, and we have not received a yes or no yet, but questions are still being asked so the process appears to be moving.

The Town Council also discussed the possibility of constructing sediment banks to help with the flow of flood waters.

Discussion on Culinary Water Development

With the recent adoption of the Infrastructure Improvement Plan the 5- and 10-years projections are in place and the Town Council discussed the possibility of using a neighboring well.

Discussion on Wastewater Development

As part of long-range planning the Town needs to consider that at some point in time they may need to develop, hopefully in conjunction with Mohave County, a wastewater treatment facility that can serve the greater area on the Arizona side.

The Town Council discussed the benefits of operating a mechanical plant vs. an evaporative plant and overall agreed it would be a benefit to the Town and the Towns future growth to consider building a new wastewater plant, preferably mechanical.

Discussion on Future Staffing Needs

The Town Council discussed the need for a code enforcement officer and the possibility of combing animal control with code enforcement. The Town Council also discussed the future position of the Planning and Zoning Director.

Some concerns were raised by the Town Council about the need for funding for these positions and where to get the funding.

Mayor Howard Ream brought awareness to the Town Council about the process for Town Council members to address performance-based staffing concerns. The mayor

read from State Legislature 38-431.03 regarding the regulation of executive sessions for addressing staff concerns.

Discussion on Future Budget Concerns

A very real concern facing the Town is a potential decrease in state shared revenues for the next couple of years.

With the funding formulas all the funding that comes through the state (URS, HURF, State Sales and VLT) are all population-based formulas which means that if population in one part of the state radically increases and revenues stay about the same it will result in a funding decrease to the Town.

The Town Council discussed the future budget and consequences funding cuts, and the serious need to get approved for a mid-term census.

Adjournment 8:12

CERTIFICATION

I hereby certify that the foregoing minutes are a true and correct copy of the minutes of the Public Hearing and the work session of the Town Council of Colorado City held on the 14th day of March, 2024. I further certify that the meeting was duly called and held and that a quorum was present.

Dated this 15th day of April 2024

Town Clerk



TOWN OF COLORADO CITY

P. O. Box 70 * Colorado City, Arizona 86021

Phone & TDD: 928-875-2646 * Fax: 928-875-2778

AIRPORT MANAGER'S REPORT

April 02, 2024

Airport Operations

Total recorded operations for March 2024, were 521. March 2023 (a year ago) traffic counts were 322.

Fuel sold for March 2024: Jet A = 968 gallons, Avgas = 1011 gallons.

Private Hangars:

No one has started their hangar even though I've told them they could go ahead, survey, and start construction, just not go vertical until we receive FAA approval.

We still do not have an infrastructure deposit cost for customers. Still waiting for the town manager.

Runway Parallel Taxiways

We still do not have the lights installed on the East taxiway.

The west parallel taxiway construction project is now being advertised (since March 28th) in the St. George Spectrum and the Mohave County Minor. Advertising documents have also been sent directly to 21 individuals who have expressed interest in the project. We have a pre-bid construction meeting tentatively scheduled for April 11th at 1 PM at the airport. Bid opening is scheduled for April 25th at 1 PM at the City Offices. We plan to have all known costs presented to FAA by May 1st so that they can write the grant.

We held an FAA coordination meeting on March 6th wherein the FAA presented several concerns about the project. We discussed these issues, and it appears that they have all been resolved with no major changes to the project.

Airport Maintenance

We Replaced one lamp and one ballast in the rotating beacon this last month, and it appears to be functioning properly at this time.

We have been sealing leaks that were discovered during the recent rainstorms, on the Westwing Hangar. We have also been installing more lights overhead lights in the hangar for better visibility. We recently had the Manlift repaired and have been using it for these projects.

Westwing remains very busy with aircraft maintenance and fuel sales.

Thank you!

LaDell Bistline Sr.

Airport Manager



TOWN OF COLORADO CITY

P. O. Box 70 * Colorado City, Arizona 86021

Phone & TDD: 928-875-2646 * Fax: 928-875-2778

BUILDING OFFICIALS REPORT

April 10, 2024

Building inspections and permitting have remained steady. There was a lot of time spent on a plan review for a recreational building at the Colorado City Unified School District. The permit was issued, and they are nearing completion of the footings. This building will have two basketball courts with stadium seating.

There are 19 permits in plan review and about 25 applications that have been started but not yet submitted.

COLORADO CITY CDBG GRANT MANAGEMENT

Regional Account (RA)

The construction is complete on the Hildale Street project. We are waiting for the final inspection and approval from the engineer. Final payments and draw request will follow the engineer's approval. We expect to be able complete the close out documents ahead of the November 1, 2024, termination date.

State Special Projects (SSP)

A meeting with staff and the engineer is needed for the final details of the construction drawings. We are still looking forward to be able to have a bid award at the May Council meeting.

The final touches are being made on the environmental review for the fire hydrant project. We are preparing a "Combined Notice of Finding of No Significant Impact and Intent to Request Release of Funds" which will be posted this week. The request will be sent to ADOH in the first week of May. The Final approval from ADOH will be the completion of the ERR. We expect to see a NOFA for the 2024 SSP soon.

Respectfully submitted,

Andrew J. Barlow, CBO
Building Official

MARCH 2024
COLORADO CITY - BUILDING DEPT. SUMMARY

Residential Permit Totals:	12
Single Family Dwellings:	1
Townhomes / Condos (2+ Unit Bldgs, Not Stacked):	0
Multi-Family Dwellings (2+ Units stacked):	1
Commercial Permit Totals:	3
TOTAL:	15

YTD Residential:	17
YTD Commercial:	3
YTD Total:	20

Residential Permit Valuations:	\$ 1,000,023.44
Commercial Permit Valuations:	3,372,374.81
TOTAL:	\$ 4,372,398.25

YTD Valuation Residential:	\$ 1,464,331.17
YTD Valuation Commercial:	3,372,374.81
YTD Total:	\$ 4,836,705.98

Fees collected for MARCH 2024

Residential Permit:	\$ 5,951.88
Commercial Permit:	\$ 11,326.03
Total:	\$ 17,277.91

TOTAL INSPECTIONS COMPLETED FOR MARCH 2024: 39

TOTAL INSPECTIONS COMPLETED FOR YEAR TO DATE: 122

12 YEAR HISTORY OF SINGLE FAMILY DWELLING PERMITS ISSUED

2013	2016	2019 - 4	2022 - 11
2014	2017	2020 - 7	2023 - 17
2015	2018	2021 - 16	2024 - 4

Colorado City & Hildale City Permit Summary

(01/01/24 to
03/31/2024)

	Permit Issued	Total Valuation	Total Fees
Residential Permit			
Addition	1	171,189.65	\$ 1,880.68
Casita	1	46,178.37	\$ 518.75
Change of Occupancy	1	206,127.54	\$ 150.00
Electrical	1	0.00	\$ 75.00
Garage	1	71,001.00	\$ 1,083.75
Mobile Home	3	159,883.78	\$ 1,350.00
New Home	3	371,848.91	\$ 3,068.76
New Home - Multiplex	1	255,146.68	\$ 1,815.00
Remodel	1	0.00	\$ 633.40
RV	4	182,955.24	\$ 400.00
Residential Permit Totals:	17	1,464,331.17	\$ 10,975.34

Commercial Permit			
Commercial Remodel	1	110,214.00	\$ 0.00
Shell	2	3,262,160.81	\$ 11,326.03
Commercial Permit Totals:	3	3,372,374.81	\$ 11,326.03

Grand Totals:	Permit Issued 20	Total Valuation 4,836,705.98	Total Fees \$ 22,301.37
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Completed Inspections Report

Report Generated On April 10, 2024

MARCH 2024

Commercial

Footings/Piers	3
Insulation	1
Interior Sheetrock	1
Lath	1
Rough Electrical	1
Rough Framing	1
Rough Mechanical	1
Rough Plumbing	1

Total Commercial: 10

Residential

Electric Meter Set	1
Final	2
Final C/O	4
Footings/Piers	1
Insulation	1
Int/Ext Sheer	1
Lath	2
Permanent Power	1
Pre-Gunite	1
Roof	2
Rough Electrical	2
Rough Framing	2
Rough Gas	1
Rough Mechanical	2
Rough Plumbing	2
Set Back	1
Shear Wall	3

Total Residential: 29

REPORT SUMMARY

Commercial Inspections:	<u>10</u>
Residential Inspections:	<u>29</u>
Total Inspections:	<u>39</u>

MARCH 2024
HILDALE BUILDING DEPT SUMMARY

Residential Permit Totals:	1
Single Family Dwellings:	0
Townhomes / Condos (2+ Unit Bldgs, Not Stacked):	0
Multi-Family Dwellings (2+ Units stacked):	0
Commercial Permit Totals:	0
TOTAL:	1

YTD Residential:	2
YTD Commercial:	1
YTD Total:	3

Residential Permit Valuations:	\$ 39,897.47
Commercial Permit Valuations:	0.00
TOTAL:	\$ 39,897.47

YTD Valuation Residential:	\$ 39,897.47
YTD Valuation Commercial:	206,841.60
YTD Total:	\$ 246,739.07

Fees collected for MARCH 2024

Residential Permit:	\$ 367.93
Commercial Permit:	\$ 0.00
Total:	\$ 367.93

TOTAL INSPECTIONS COMPLETED FOR MARCH 2024: 6

TOTAL INSPECTIONS COMPLETED FOR YEAR TO DATE: 55

12 YEAR HISTORY OF SINGLE FAMILY DWELLING PERMITS ISSUED

2013	2016	2019	2022 - 19
2014	2017	2020 - 3	2023 - 6
2015	2018	2021 - 4	2024 - 1

Completed Inspections Report

Report Generated On April 10, 2024

MARCH 2024

Commercial

Lath	1
Rough Electrical	1
Rough Framing	1
Rough Mechanical	1
Rough Plumbing	1

Total Commercial: 5

Residential

Und. Plumbing	1
---------------	---

Total Residential: 1

REPORT SUMMARY

Commercial Inspections: 5

Residential Inspections: 1

Total Inspections: 6



Colorado City Police Department
Hildale City Police Department
Courage-Compassion-Integrity

Robbins A. Radley
 Chief Marshal

Police Department Report

March 2024

Patrol: In Colorado City officers took 262 total cases and in Hildale City 184 total cases. Total traffic stops in Colorado City were 100 with 30 citations and 65 warnings. Hildale City had 109 total traffic stops with 30 citations and 69 warnings.

Below is a list of the crimes we have submitted to the state of Utah covering Jan 1, 2024 through February 29, 2024. Numbers aren't submitted until 15 days into the next month. So March numbers have not been submitted yet. We don't have a report for AZ.

UT0271200 HILDALE PD

Hate Crime – A committed criminal offense that is motivated in whole or in part, by the offender's bias

Total	
-------	--

LEOKA (Law Enforcement Officers Killed and Assaulted)

Total	
-------	--

NIBRS Data

Group A Offenses

Aggravated Assault	0
All Other Larceny	3
Animal Cruelty	0
Arson	0
Assisting or Promoting Prostitution	0
Bribery	
Burglary/Breaking & Entering	0
Counterfeiting/Forgery	0
Credit Card/Automatic Teller Machine Fraud	0
Destruction/Damage/Vandalism of Property	3

Drug Equipment Violations	1
Drug/Narcotic Violations	1
Embezzlement	0
Extortion/Blackmail	0
False Pretenses/Swindle/Confidence Game	0
Fondling	0
Hacking/Computer Invasion	0
Human Trafficking, Commercial Sex Acts	0
Human Trafficking, Involuntary Servitude	0
Identity Theft	0
Impersonation	0
Incest	0
Intimidation	0
Kidnapping/Abduction	0
Motor Vehicle Theft	0
Murder & Nonnegligent Manslaughter	0
Negligent Manslaughter	
Operating/Promoting/Assisting	
Pocket-picking	0
Pornography/Obscene Material	1
Prostitution	0
Purchasing Prostitution	0
Purse-snatching	0
Rape	0
Robbery	0
Sexual Assault with an Object	0
Shoplifting	0
Simple Assault	0
Sodomy	0
Statutory Rape	0
Stolen Property Offenses	1
Theft From Building	0
Theft From Coin-Operated Machine or Device	0
Theft From Motor Vehicle	0
Theft of Motor Vehicle Parts or Accessories	0
Weapon Law Violations	0
Welfare Fraud	0

Wire Fraud	0
Total	10

Group B Offenses

All Other Offenses	
Curfew/Loitering/Vagrancy Violations	
Disorderly Conduct	1
Driving Under the Influence	
Family Offenses, Nonviolent	
Liquor Law Violations	1
Trespass of Real Property	
Total	2

Administration:

Memorandum: Regarding Chief Radley's MVA 04/03/2024

At approximately 1800 hrs on 04/03/2024 I was traveling towards Hurricane City from the police department. I was on a work telephone call speaking on the phone via my truck's hands free capability when I reached the lower part of the "S" curves on SR 59.

I had just a second to see that a white full sized truck was crossing the centerline into my lane of travel. I swerved to the right as far as I could up against the retention barrier at which time I was hit just narrowly missing a direct head-on collision.

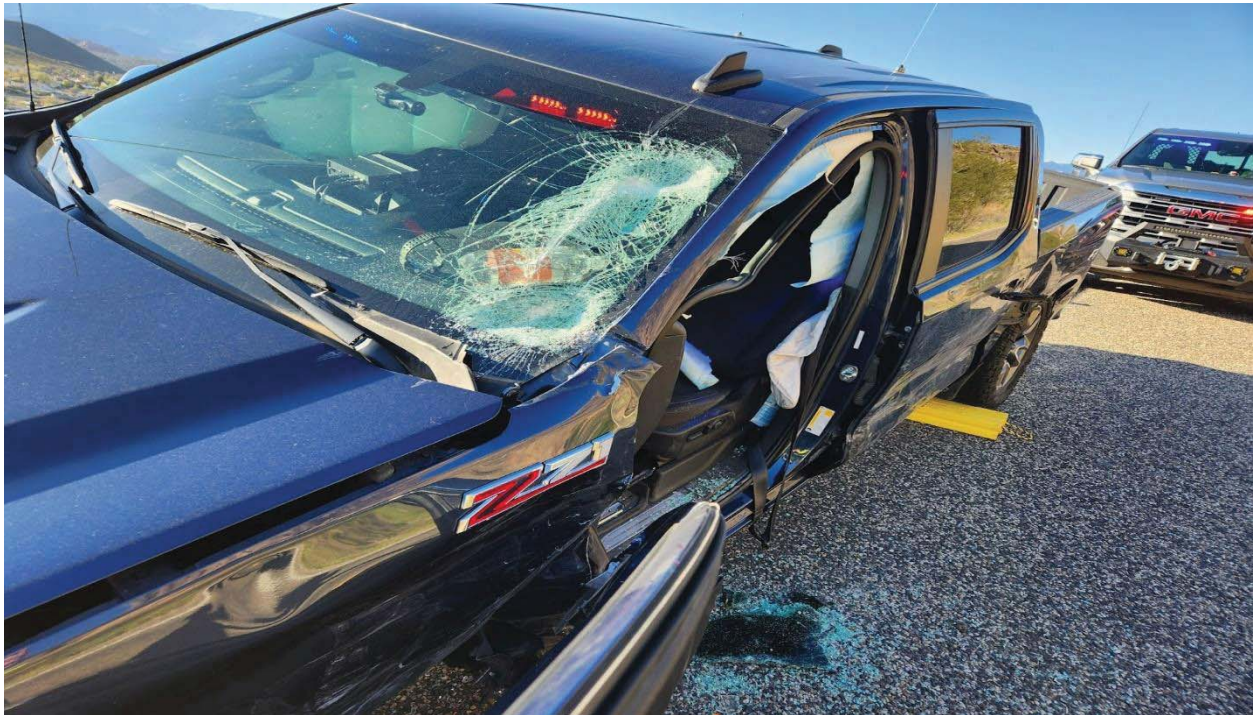
The front left tire of my truck was removed upon impact which caused my truck to slide to a stop. Due to the amount of damage to my truck and being next to the barrier railing the fire department removed the driver's side door to get me out of the truck.

My injuries from the accident will not be discussed in this memorandum.

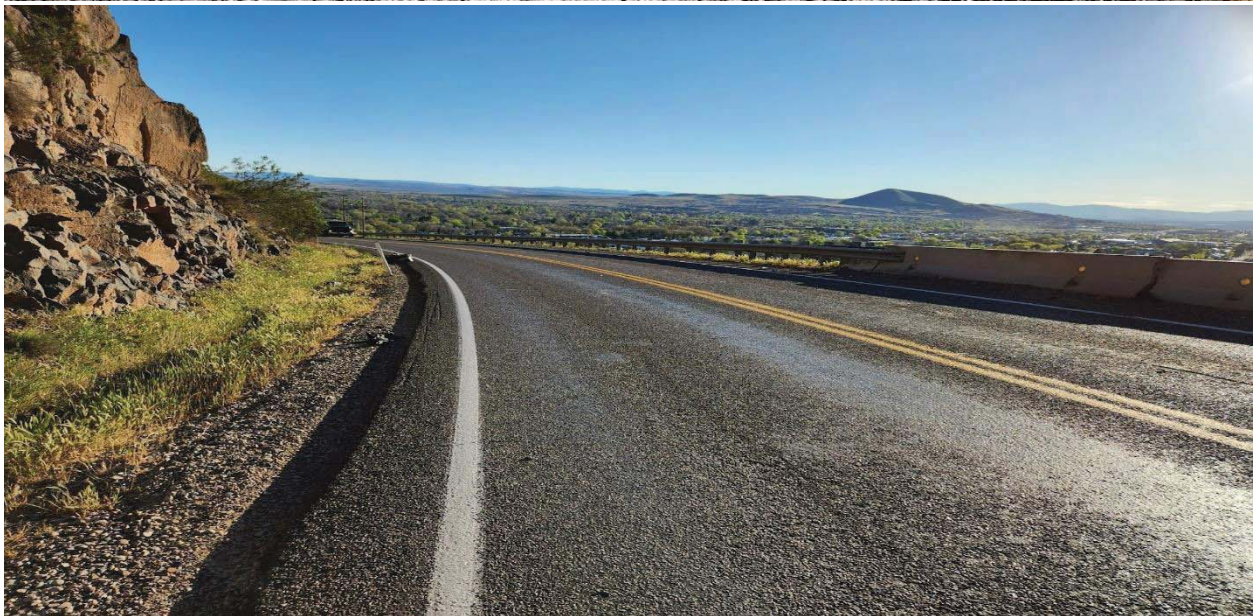
The other truck involved in the crash continued a short distance up the roadway before coming to a stop. That truck also lost the front left tire in the crash. The driver of the white truck was issued a traffic citation for causing the crash.

I have attached photos of the crash:







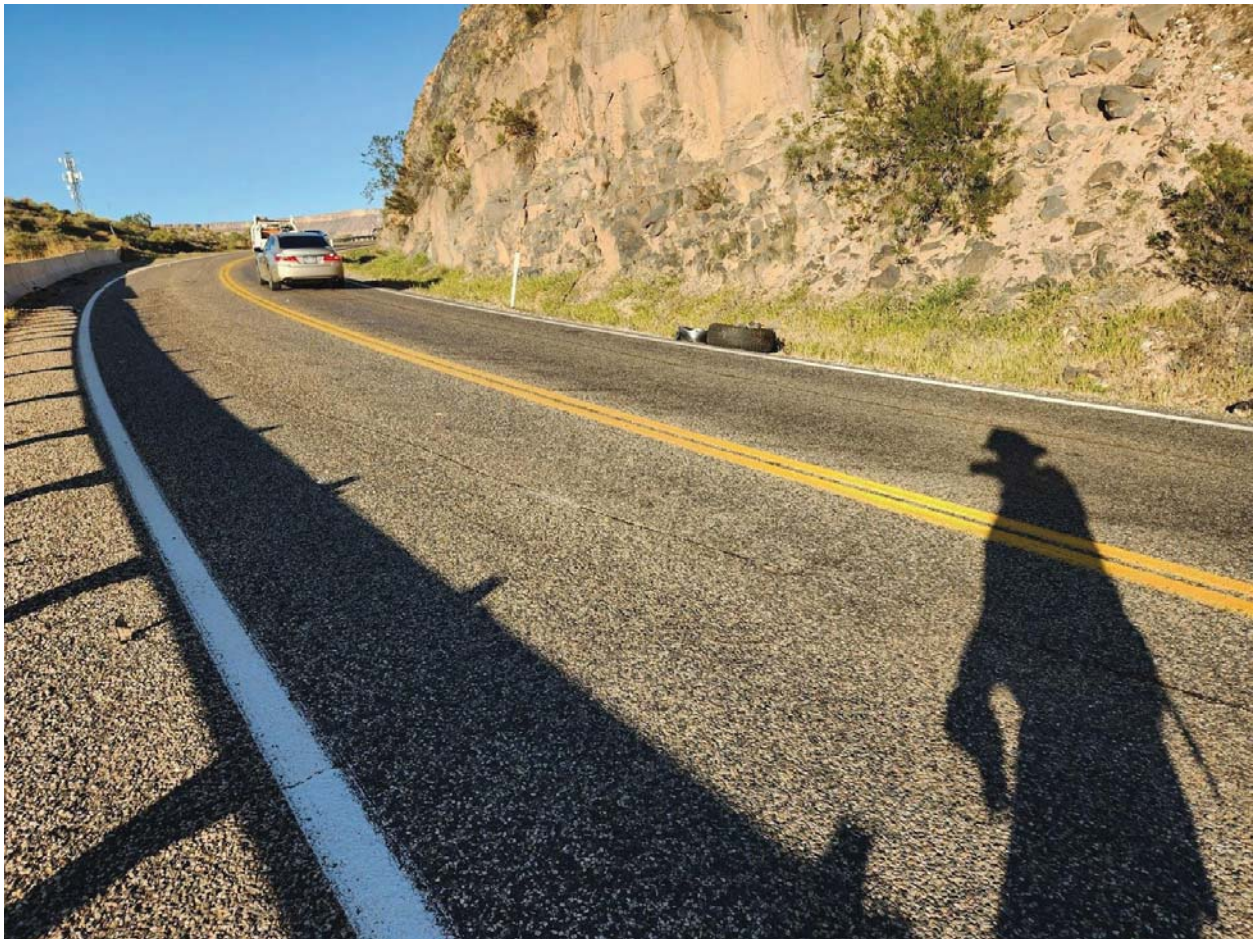
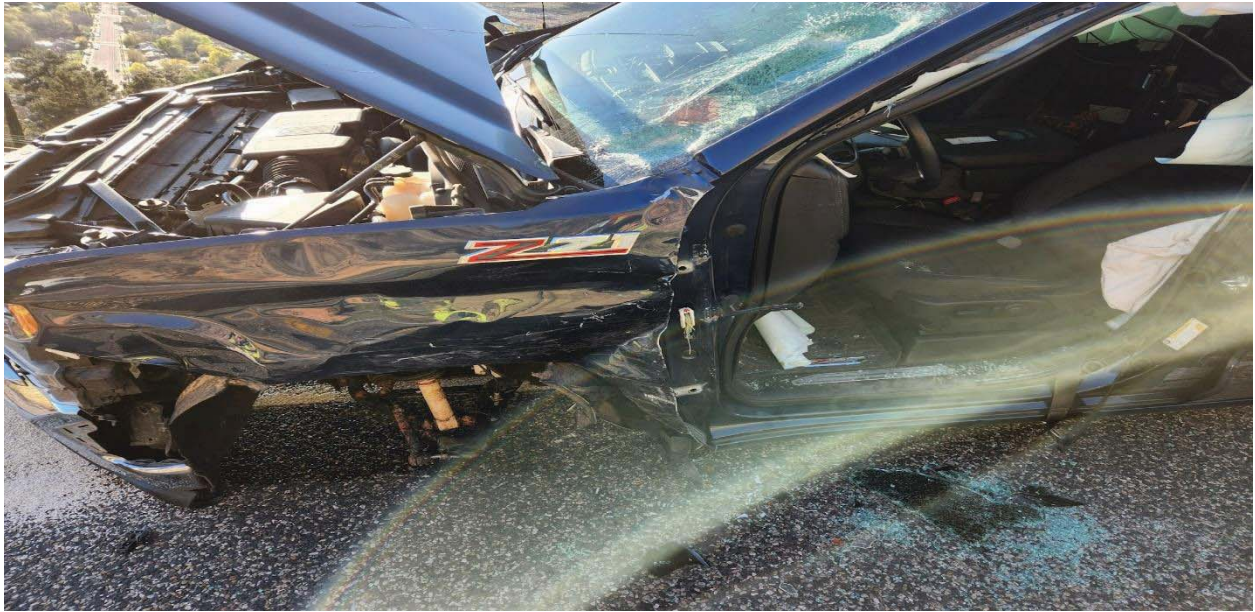


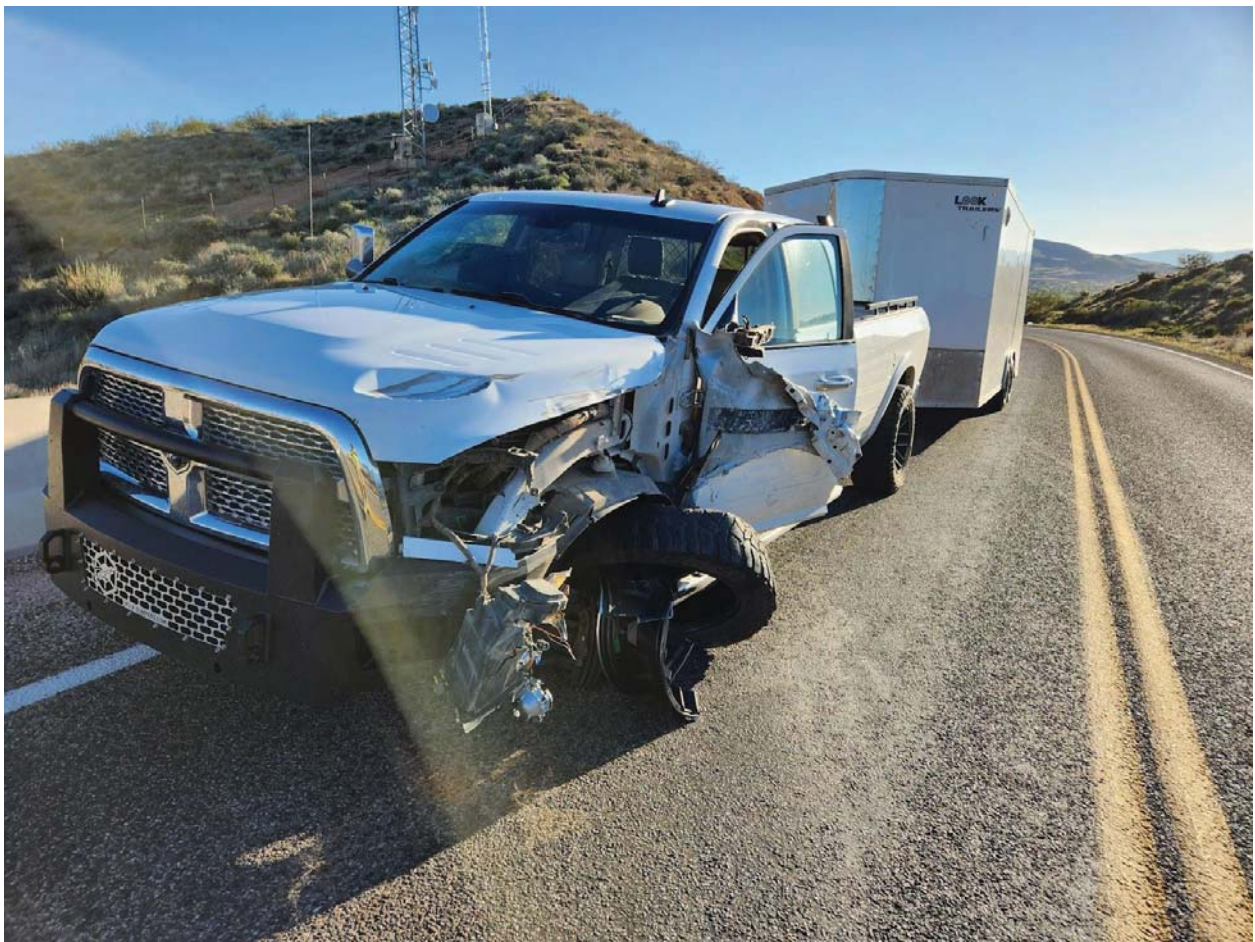














Public Works Report

April 9, 2024

We hauled 500 yards road base onto on Jessop Ave. and Boxelder St. The first part from the highway to Boxelder is finished. We are waiting for more base to be made to finish.

We had all our trucks haul cinder from East Hurricane pit for 3 days.

Ran the crusher couple days made about 1500 yds base before the clutch went out. will have it running as soon as parts arrive.

Put base and fixed damaged alongside the road on Mohave and Redwood to Airport. The stop signs at the corner of Airport Ave. and Redwood St. have been damaged and repaired a couple times.

Finished the approach and cleaned up around the crossing on Academy Ave.

We took 3 days and did cracksealing on the airport taxiway heading north.

Some time was spent fixing signs that were down or needing replaced.

We are working on making our community streets better.

Thanks for the opportunity to help improve our community.

Public Works Director



Spring Cleanup 2024

Colorado City residents:

23 loads

2 Rolloffs

Hildale residents:

10 loads

2 Rolloffs

6 loads came on Saturday.

The total 36.5 tons of waste dumped on cleanup.

Parks Department Report

This time of year, is when we "wake up" the parks. We discover all the new leaks and anything that needs adjusted before we head into the new season. We have gotten a slower start this year because the crew spent two weeks working on the Hildale City Event center landscape right when we should have been fixing leaks and fertilizing. We got it done but it has taken longer than we had scheduled for without the help of the crew full time.

The crew has spent a lot of time and means fixing the big spray trailer so we could spray around the lights and along the runways at the airport. We were scheduled to spray April 9, 2024, but due to the increase in temperature this week the crew was needed to work on the street and roads water system. We turned the equipment over to the airport staff and let them figure out spraying there.

The parks are greening up very nicely. We have a few small spots of weeds in the lawns that we are addressing. Also a few spots that we have re-seeded.

HERITAGE PARK

The playground here has been tilled and leveled using the Ditch Witch.

We have had some continued vandalism and folks trashing areas of this park. Most visitors are respectful and do clean up after themselves. I feel it is just a few who are apt to be filled with mischief doing vandalism.

We have had some of the security lighting here go out. We replaced one fixture.

LAURITZEN PARK

I'm looking into spraying the parking areas to stop weeds from being tracked into the parks. We have some security lights out in this park. we have Lighting up electric looking into it.

STREET PARK STRIPS

Mike and Ricky are working on the water system to add whatever we can to the irrigation well with our limited budget.

Police Dept. Grounds

We have started the ground maintenance here again this year.

Town Office grounds

We have rerouted the water system to source from our irrigation well. We have done some work on the grounds and are preparing to finish the landscape around the building as soon as we get the water problems for the streets and roads fixed.

We are looking into putting a tank with our irrigation well to facilitate moving from the use of culinary water for street trees.

- *Heber white*



Utilities Monthly Report

March 2024

Gas Operations:

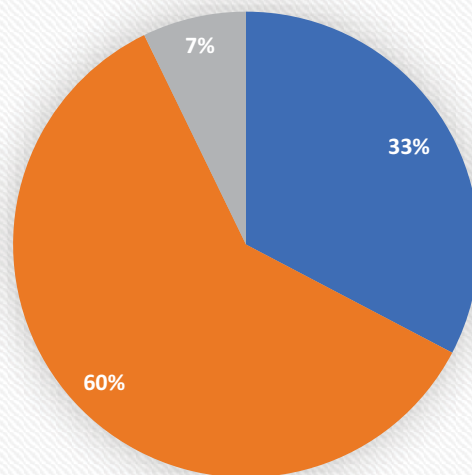
Gas staff connected one (1) new service line to metered natural gas customers this month. The Utility Technicians inspected gas meters for corrosion damage and painted and touched them up for the Atmospheric Corrosion Survey. This report is a state requirement every three (3) years and provides utilities with atmospheric corrosion records for above-ground piping. Staff filed the annual Pipeline and Hazardous Materials Safety Administration (PHMSA) reports for both Utah and Arizona.

Natural Gas billed to Colorado City and Hildale City customers for February 2024.

Description	Quantity Billed*	Number of Customers
Natural Gas Purchased	6,385,300	
Natural Gas Billed Colorado City	2,087,400	359
Natural Gas Billed Hildale City	3,838,200	313
Natural Gas Non-Revenue Usage	459,700	

*Numbers are in Corrected Cubic Feet (100 Corrected Cubic Feet = 1 Therm)

February 2024 - Gas Billed

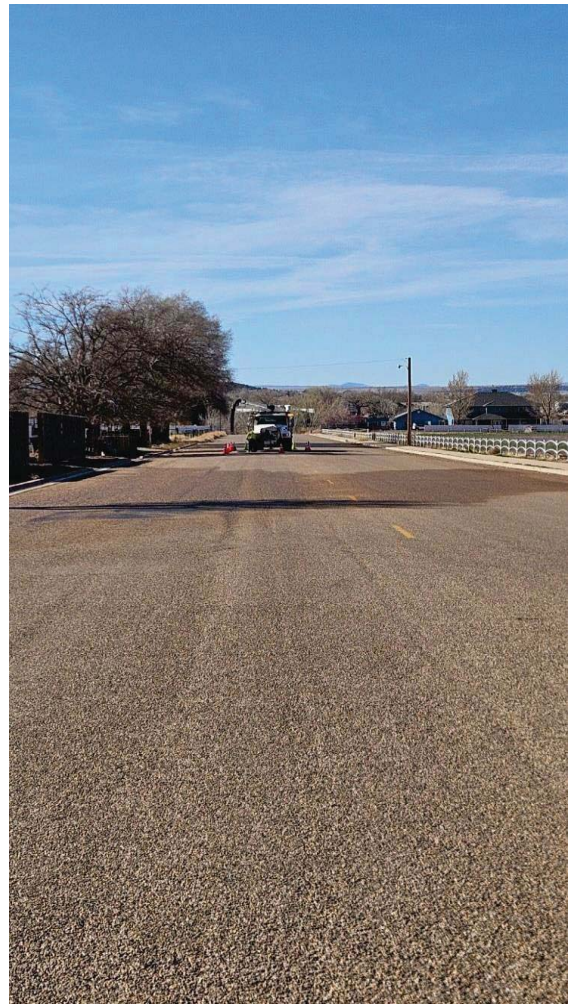
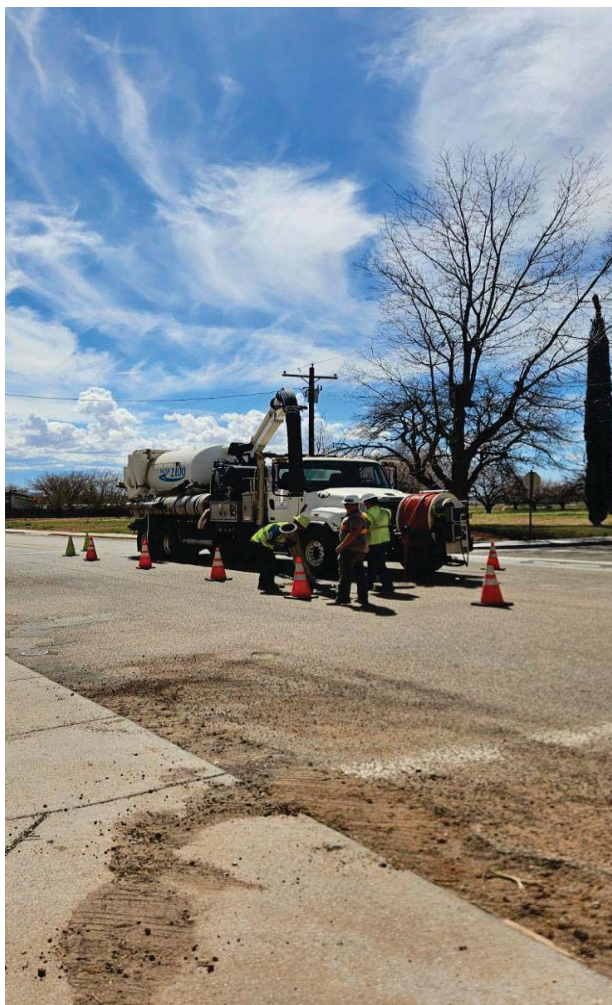


■ Natural Gas Billed Colorado City
 ■ Natural Gas Billed Hildale City
 ■ Natural Gas Non-Revenue Usage



Sewer Operations:

The Utility Crew cleaned 15,226 feet of sewer main line this month. Utility Lead Technicians mentored new crew members in the Vac-Truck operations, sewer line jetting, and safe traffic control. Staff have been flushing fire hydrants in conjunction with sewer jetting, which has increased the mainline water quality. The sewer Plant and Lift Station are in good working order and have been running efficiently.





Water Operations:

Utility Technicians repaired three (3) of the four (4) fire hydrants that have been inoperable. Staff have ordered parts for the fourth fire hydrant.





Water Treatment Plant Projects

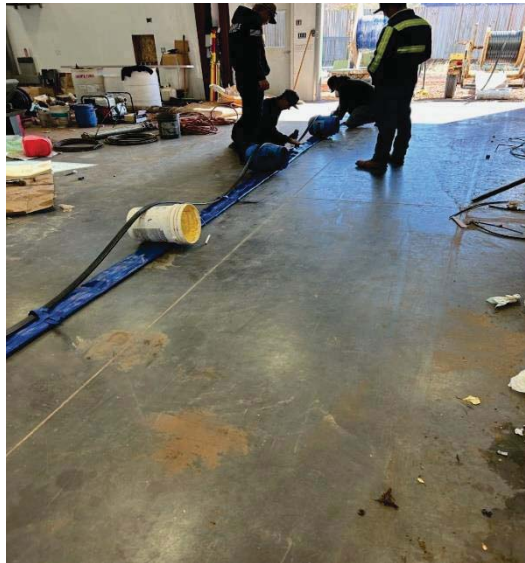
At the Water Treatment Plant, the Utility Team replaced a booster pump motor, that has been out of service, and three (3) leaking water valves. Staff changed piping and valves to make the Water Treatment Plant operate more efficiently and increase the system capacity. Staff started loading the filter media into the vessels on the east side of the plant.





Well 17

We received the pump, motor, and accessories for Well 17 and are preparing to install them into the well casing as soon as possible.

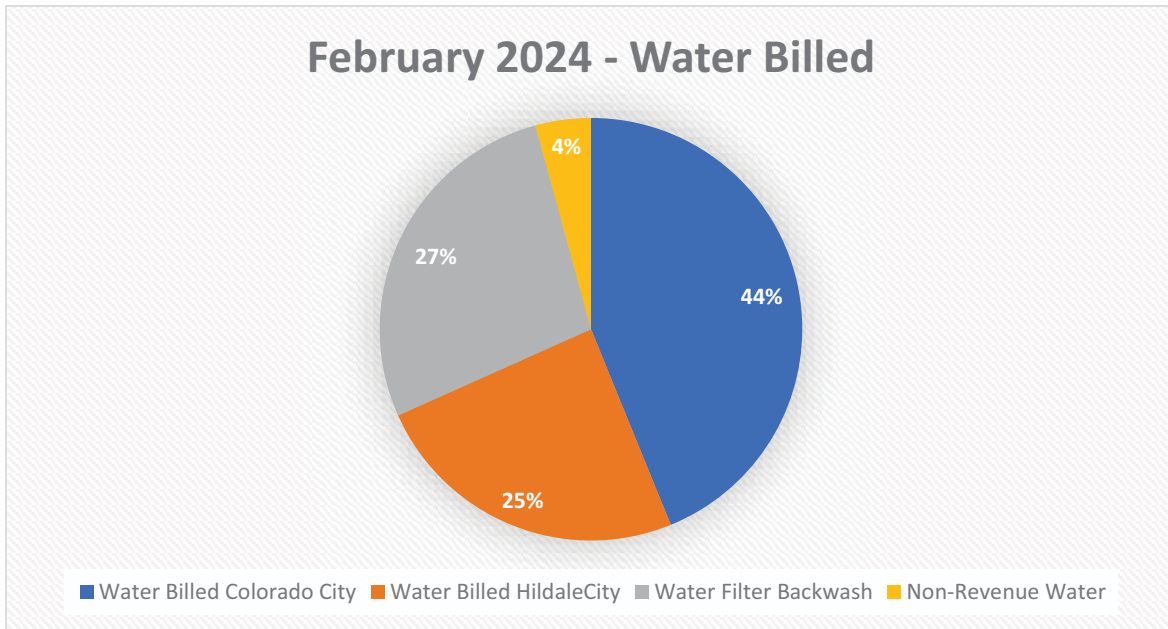




Water billed to Colorado City and Hildale City customers for February 2024.

Description	Quantity Billed*	Number of Customers
Water Produced	12,423,000	
Water Billed Colorado City	7,505,000	774
Water Billed Hildale City	4,191,000	379
Water Filter Backwash	4,698,000	
Non-Revenue Water	727,000	

*Numbers are in gallons





Administration:

The bids were received for the Wells installation as part of the Mohave County Grant to Colorado City. Well bids were within the estimated costs and were awarded Monday, March 4, 2024.

The Raw Water Line bids were significantly higher than estimated and will not be awarded as the funding is not available to complete the project as designed and bid. Staff will work with the Engineer to re-design the system and go out for a re-bid on April 4, 2024.

The Rate Study, through the Rural Community Assistance Corporation (RCAC), was reviewed by the Utility Advisory Board (UAB) at a special Work Session on March 7, 2024, led by RCAC staff to verify the opportunities to increase rates and provide for conservation measures, as required by EPA, Arizona and Utah. After the initial rate options were discussed and reviewed by the UAB and a recommendation on the selected alternative, (3.3) will be sent to the Councils the beginning of April. The project is being funded through the United States Department of Agriculture – Rural Development (USDA-RD).

Second compliance sampling for PFAS was completed at all the water sources in the HCC system at the end of February. Once we get the results, we will work with Utah Division of Drinking Water (DDW) and Arizona Department of Environmental Quality (ADEQ) for what, if any, steps need to be taken.

Staff have been working on design and cost for the installation of a Booster Pump Station to eliminate the low-pressure zone in the southwest portion of Hildale. The consulting engineer has located the best place in the system to install the booster pumps to provide the greatest positive impact to the system. The booster pumps will allow construction of buildings and provide increased fire flows for the area.

Utilities staff have decided on the conversion of the current gas and water meter reading system using an updated radio read system that will provide better service and reliability. The system will be put out for bid and selection of a provider soon and presented to the UAB and Councils. The current system, Badger Meter, has



discontinued the gas meter portion of their sales. Staff recommend moving to a generic reading system that can be used on all existing meters. The price for conversion and the reading devices would be significantly cheaper than making a change to another meter and radio reading company. Prices for the conversion have been received and Utilities Department will submit a Grant with the Bureau of Reclamation under the WaterSmart Program.



TOWN OF COLORADO CITY

25 S. Central Street • Box 70 • Colorado City, AZ 86021

Phone: 928-875-9160 Fax: 928-875-2778

Town Manager Report to the Council

April 11, 2024

Honorable Mayor & Council

The Arizona Legislature is in session, and I am attending the League updates and monitoring the legislation that could affect the Town. Governor Hobbs vetoed a very bad bill that would have adversely affected the Town's ability to manage the residential zones, there are still some bad bills in process relating to zoning and building. We will most likely be doing some zoning code amendments after the legislative session is completed.

The staff is working on an updated fee schedule and plan to have the notice of intent ready for the May Town Council meeting. We are also beginning the review of the development standards to incorporate some more street designs into the code.

The Airport East Taxi-way project is still paused waiting for all the light components. The West taxiway is in the bidding stage. The project is expected to be about three and half million with all alternatives, the final amount and options will depend on FAA funding availability. We anticipate about \$154,000 local match will be required for the project.

On the ARPA well project, the construction contract is being completed and the well drilling is scheduled to begin within a week. The raw water line is back out to bid with a bid opening scheduled for Friday April 19.

The Town has applied for a Congressionally Designated Funding request with Senator Kelly's office for \$600,000 for a storm water project on Airport Avenue. We are also working on another request to be filed with Representative Gallego's office.

I have asked the police and roads departments to provide short- and long-term projects, staffing and funding needs based on the growth projections in the Culinary Water Masterplan. Staff have begun working on the FY 25 budget and finishing up the FY23 financial audit.

A lot of time is spent on planning & zoning questions and meeting with developers, etc. Staff are meeting, almost daily, with landowners and developers with questions on the development of various projects, etc.

I want to express my gratitude for the Department Heads who are taking an active role in overseeing and managing their departments and budgets as well as all the Staff and Employees that are making the Town work and providing municipal services to the citizens of the area.

Thank You

Vance Barlow, CPM,
Town Manager

RESOLUTION NO. 2024-09

A RESOLUTION OF THE MAYOR AND COUNCIL OF THE TOWN OF COLORADO CITY, ARIZONA, ADOPTING WATER DEVELOPMENT FEES IN COMPLIANCE WITH STATE LAW.

WHEREAS, Arizona’s enabling legislation for development fees, A.R.S. § 9-463.05 (“Development Fee Statute”) requires the Town to adopt an Infrastructure Improvement Plan (IIP) which includes land use assumptions (LUA) and a development impact fee report, collectively known as the “Development Fee Documents”. The Development Fee Statute also requires a two-phase adoption process, whereby the IIP and LUA are reviewed, refined and adopted before the development fee report is addressed; and

WHEREAS, Colorado City’s culinary water system is jointly managed through an intergovernmental agreement with Hildale City, Utah, some of the terminology used to refer to the Development Fee Documents are interchangeable as follows: Impact Fee Facilities Plan (IFFP) which is the Infrastructure Improvements Plan (IIP) and includes the Land Use Assumptions (LUA); And the development impact fee analysis which is the development impact fee report or study.

WHEREAS, the preliminary IIP, LUA and development fee report were released to the public on November 9, 2023, a notice of public hearing for January 8, 2024, to receive public comment on the IIP and LUA was posted on November 9, 2023, pursuant to A.R.S §9-463.05; and

WHEREAS, the Council held a public hearing on January 8, 2024, to receive public comment on the IIP and LUA, and on February 12, 2024 the Council approved Resolution 2024-04 adopting the IIP and LUA, and a notice of public hearing for March 14, 2024 to receive public comment on the development fee report and analysis which public hearing was posted per A.R.S §9-463.05 and the adopted copy of the IIP and LUA posted on the Town website and available for review by the public at the Town Clerk’s office; and

WHEREAS, the Council held a public hearing on March 14, 2024 to receive public comment on the development fee report and analysis, and Development Fee Documents have been updated to include comments received from the public, including representatives of the development community; and

WHEREAS, the Council desires to conclude the second phase of the water development fee process by approving the final development fee report and analysis by this Resolution 2024-__, and setting specific water development impact fees

NOW THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE TOWN OF COLORADO CITY, ARIZONA, as follows:

Section 1. The recitals above are hereby incorporated as if fully set forth herein.

Section 2. The final water development impact fee report and analysis is hereby adopted in substantially the form and substance of Exhibit A, attached hereto and incorporated herein by reference.

Section 3. In accordance with the development fee report, water development impact fees are hereby set as follows:

Meter Size	ERUs	Development Fee
5/8" & 3/4"	1.00	\$11,807.00
1"	1.78	\$20,990.22
1-1/2"	4.00	\$47,228.00
2"	7.11	\$83,960.89
3"	16.00	\$188,912.00
4"	28.44	\$335,843.56
6"	64.00	\$755,648.00

Section 4. In accordance with the Development Fee Statute, the development fees set forth in Section 3 above shall not be effective until 75 days after the date of this Resolution.

Section 5. The Mayor, the Town Manager, the Town Clerk, the Town Attorney and the Utility Department are hereby authorized and directed to take all steps necessary to carry out the purpose and intent of this Resolution.

PASSED AND ADOPTED by the Mayor and Council of the Town of Colorado City, Arizona, this 15th day of April 2024.

Mayor

ATTEST:

Town Clerk

APPROVED AS TO FORM:

Mangum, Wall, Stoops & Warden, P.L.L.C.
Town Attorney

Utility Department

To: Eric Duthie, Hildale City Manager, Vance Barlow, Colorado City Town Manager

From: Jerald A Postema, Utility Director *Jerald A Postema*

Page | 1

Date: April 5, 2024

Cc: Nathan Fischer, Utility Superintendent

Re: **Water Impact Fees**

During the past three (3) years, Sunrise Engineering has been working on an updated Water Master Plan and Facilities Plan for the two (2) communities. Over the span of the past few years, many changes in the communities have occurred requiring the Water Master Plan to be reviewed and updated. Land Annexation in Hildale, large, new subdivisions and high-density structures in Colorado City being the main changes for growth, water system expansion and meeting regulatory compliance. In addition, working within the laws of both Arizona and Utah on developing the zonal Impact Fees/Development Fees were a critical part of the final documents and proposed ordinances.

With the adoption of the January 2024 Water Master Plan, Facilities Plan and Impact Fees, costs for new infrastructure will be allocated to new growth and not to current residents and customers. The fee structure for the Impact Fees is outlined in the Water Master Plan in Figures X-1, Maximum Zonal Impact Fees for Hildale and X-2, Maximum Zonal Development (Impact) Fees for Colorado City. The two Figures were part of the overall Water Master Plan Study and zonal cost allocation for growth.

The two (2) Figures, X-1 and X-2 are included in the Impact Fee Ordinance by meter size. The study determined the cost per Equivalent Residential Unit or ERU. The cost allocation based on meter size was also calculated by the flows of each meter in relationship to one (1) ERU.

The typical single family residential house in the communities is equal to one (1) ERU. The typical single family meter size is 3/4" diameter by 5/8" laying length also known as a 3/4 inch meter, or one (1) ERU. In 2023, 1,033 of the 1,314 total connections were for residential buildings.

As flows are increased to meet the demand for water in the various buildings, water meters need to be installed sized to meet these increased flow requirements. Using the 3/4 inch meter as the base for the residential flows, the larger meters are calculated to determine additional demand

on the water system and overall infrastructure. In order to meet these demands across the system for the new growth a proportionate share of the flows are calculated into the equivalent ERU.

For example: Going from a 3/4 (0.75)-inch meter to a 1.5-inch meter does not double the amount of flow the meter is capable of producing, it actually provides over 4 times the amount of water which can flow through a 3/4-inch meter.

3/4-inch meter flow in gallons per minute – 25

1.5-inch meter flow in gallons per minute – 120

The same formula is used for the calculating the Development or Impact Fees:

3/4-inch meter Impact Fee – 1 ERU

1.5-inch meter Impact Fee – 4 ERU

Because Impact and Development Fees are based on the ERU formula in the Water Master Plan and Infrastructure Facilities Plan and water meters are sized for the water capacity needed by the building/property, the Fees are tied to the meter sizes based on water usage needs.

HILDALE CITY & TOWN OF COLORADO CITY CULINARY WATER MASTER PLAN UPDATE

January 2024

DRAFT

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Appendix D – System Maps

Appendix E – Impact Fee Analysis

Appendix F – Impact Fee Certification

I. INTRODUCTION

Hildale City is located along Highway 59 in Washington County in southwestern Utah. The Town of Colorado City is neighboring Hildale, just across the border in Mohave County, Arizona. The water system is shared and funded by both communities (city) and is operated and maintained by the Hildale & Colorado City Utility Department (HCCUD) through an Inter-Governmental Agreement (IGA) with Colorado City. This plan was created with coordination from staff from Hildale City, the Town of Colorado City and the HCCUD.

Hildale City completed a previous Culinary Water Master Plan Update in 2020, which was an update to their 2014 plan. Hildale City has contracted with Sunrise Engineering to complete an update to the 2020 plan. While this is a shorter window between plans than is typical, the city has recognized that conditions and future projections have changed significantly in that short time period. The intent of this update is to account for these changes.

The culinary water system has been analyzed under the State of Utah Division of Drinking Water guidelines to determine the current system status and to evaluate possible system needs as the community grows during the next 20 years. As part of this plan, Sunrise Engineering, Inc. has included recommended improvements to the culinary water system and has developed a potential financing plan that will help Hildale City and the Town of Colorado City obtain the necessary funds for the recommended improvements.

This plan also serves as the Impact Fee Facilities Plan for Hildale City and includes an Impact Fee Analysis. This plan also serves as the Infrastructure Improvements Plan for the Town of Colorado City.

This report does not analyze water rights or a secondary water system. This plan also does not include a user rate analysis.

II. SYSTEM USERS' ANALYSIS

A. LENGTH OF PLANNING PERIOD

It is typical for a master plan to use a 10 or 20-year planning period. The first year of a 10-year planning period would be the calendar year 2024 with the 10th and final year being 2033. This plan will use fiscal years and will assume a 20-year (2024-2043) planning period for recommended improvements. This period will allow an adequate evaluation of the system for potential infrastructure improvements or other needs. Revenue sources should be carefully evaluated each year as budgets are set by the city and town council.

B. PROJECTED GROWTH RATE

An important element in the development of the water system and capacity analysis is the projection of the city's population growth rate on an annual basis. This projection gives the planner an idea of the potential future demands on the culinary water system for the length of the planning period.

Projecting the number of future culinary water connections can be a subjective process. The most effective method of estimating the number of future connections is by analyzing past historical numbers of connections and census records. Because Hildale and Colorado City utilize the same water system, the census records and past numbers of connections of both Hildale and Colorado City were included in the analysis. In the past five years the communities have seen a fluctuation of positive and negative growth rates. Due to this fluctuation, analyzing the historical growth rates is an inaccurate method of predicting future growth for these communities. Figure II-1 below shows the historic population in both communities.

Figure II-1: Historic Population

Calendar Year	Hildale Population	Colorado City Population	Total Population	Est. Growth Rate	Number of Connections
2018	2,916	4,825	7,741	0.21%	863
2019	2,910	4,836	7,746	0.06%	763
2020	2,727	4,531	7,258	-6.30%	799
2021	2,825	4,694	7,519	3.60%	855
2022	2,931	4,871	7,802	3.76%	1,113

At the time of the previous plan, the communities anticipated minimal to no growth for the first few years of the planning window. However, in the past few years the communities have seen a significant increase in number of connections, and there are multiple new developments that are in various stages of construction and planning that are anticipated to come to each community in the planning window. Development is anticipated to continue at a relatively high rate for the length of the planning window. This abrupt change in growth is one of the main reasons the city is updating their culinary water master plan after only a few years.

Staff and elected officials from both communities looked at the upcoming developments in different stages of the approval process to determine a realistic number of anticipated new connections in future years. The number of anticipated new connections was used to determine a growth rate. In the discussions with staff from each community, it was determined that based on the expected timeline of new developments, a higher than typical growth rate will be assumed over the 20-year planning period. The following growth rates were used for this study:

- 2024-2028 (first 5 years) – 10% per year
- 2029-2033 (second 5 years) – 12% per year
- 2034-2038 (third 5 years) – 10% per year
- 2039-2043 (last 5 years) – 8% per year

C. PROJECTED POPULATION & NUMBER OF CONNECTIONS

Based on the forecasted growth rates referenced above, the number of connections the city will need to plan for can be calculated with the compound interest formula shown below.

$$F = P(1 + i)^N$$

F = Future Population P = Present Population

i = Projected Growth Rate N = Years

This equation was used to project the community population and number of connections for each year in the planning period. Figure II-2 below shows a summary of the growth rate analysis. Appendix A shows the full analysis.

Figure II-2: Growth Rate Analysis Summary

Calendar Year	Est. Growth Rate	Hildale Population	Colorado City Population	Total Population	Hildale Connections	Colorado City Connections	Total Connections
2023		3,224	5,358	8,582	435	790	1,224
2024	10.0%	3,547	5,894	9,440	478	869	1,347
2025	10.0%	3,901	6,483	10,384	526	956	1,481
2026	10.0%	4,291	7,132	11,423	578	1,051	1,630
2027	10.0%	4,720	7,845	12,565	636	1,156	1,792
2028	10.0%	5,192	8,629	13,822	700	1,272	1,972
2029	12.0%	5,816	9,665	15,480	784	1,425	2,208
2030	12.0%	6,513	10,825	17,338	878	1,596	2,473
2031	12.0%	7,295	12,124	19,419	983	1,787	2,770
2032	12.0%	8,170	13,578	21,749	1,101	2,001	3,103
2033	12.0%	9,151	15,208	24,359	1,233	2,242	3,475
2034	10.0%	10,066	16,729	26,794	1,357	2,466	3,822
2035	10.0%	11,073	18,401	29,474	1,492	2,712	4,205
2036	10.0%	12,180	20,241	32,421	1,641	2,984	4,625
2037	10.0%	13,398	22,266	35,663	1,806	3,282	5,088
2038	10.0%	14,738	24,492	39,230	1,986	3,610	5,596
2039	8.0%	15,917	26,452	42,368	2,145	3,899	6,044
2040	8.0%	17,190	28,568	45,758	2,317	4,211	6,528
2041	8.0%	18,565	30,853	49,418	2,502	4,548	7,050
2042	8.0%	20,050	33,321	53,372	2,702	4,912	7,614
2043	8.0%	21,654	35,987	57,641	2,918	5,305	8,223

It is important to understand that projected growth rates are not the cornerstone of this plan. If the number of system connections projected is reached earlier or later than anticipated, future improvements to support growth may come either earlier or later.

D. PROJECTED EQUIVALENT RESIDENTIAL UNITS (ERU)

The water system is made up of multiple connection types. Hildale City and the Town of Colorado City report their different connections to the state as either residential, commercial, industrial, or institutional. Figure II-3 shows a summary of the number of connections by type.

Figure II-3: Total Number of Units Per Connection Type

Year	Residential	Commercial	Industrial	Institutional	Total
2018	730	72	24	37	863
2019	667	66	18	12	763
2020	695	70	20	14	799
2021	742	75	23	15	855
2022	939	98	28	48	1,113
2023	1,033	108	31	53	1,225

Each of these different connection types use different amounts of water at different flow rates. To properly analyze the systems usage, the number of connections is converted to equivalent residential units (ERU). This is done by taking the usage per connection of each connection type and dividing by the usage per connection of the average residential connection. Figure II-4 and Figure II-5 show the number of ERUs per connection type and the total number of ERUs. This plan will use the number of ERUs instead of the number of connections.

Figure II-4: ERUs Per Connection Type

Residential	Commercial	Industrial	Institutional
1.0	1.4	1.1	1.7

Figure II-5: Total Number of ERUs Per Connection Type

Year	Residential	Commercial	Industrial	Institutional	Total
2018	730	71	14	33	848
2019	667	90	23	26	806
2020	695	114	14	32	855
2021	742	109	22	51	924
2022	939	142	32	82	1,195
2023	1,033	156	35	90	1,314

Applying the growth rates that were established in Figure II-2 to the number of ERUs, the projected number of ERUs can be found for the end of the planning period.

Figure II-6: Projected Number of ERUs

Calendar Year	Hildale ERUs	Colorado City ERUs	Total ERU
2023	468	847	1,315
2024	515	931	1,446
2025	566	1,024	1,591
2026	623	1,127	1,750
2027	685	1,239	1,925
2028	754	1,363	2,117
2029	844	1,527	2,371
2030	945	1,710	2,656
2031	1,059	1,915	2,974
2032	1,186	2,145	3,331
2033	1,328	2,403	3,731
2034	1,461	2,643	4,104
2035	1,607	2,907	4,514
2036	1,768	3,198	4,966
2037	1,945	3,518	5,462
2038	2,139	3,870	6,009
2039	2,310	4,179	6,489
2040	2,495	4,513	7,008
2041	2,695	4,875	7,569
2042	2,910	5,265	8,175
2043	3,143	5,686	8,829

E. AVERAGE CULINARY WATER USAGE

The State of Utah Public Drinking Water regulations require public water systems to meet requirements based upon usage. These requirements are found in the State Code R309. The code provides a standard usage based upon the types of connections serviced in a system. For a standard residential connection, the code says to assume an average daily usage of 400 gallons per day (gpd) per ERU. Historical usage data was provided by the HCCUD and that usage was compared against the 400 gpd to check if it would adequately represent the usage in the city’s system.

The historical usage from the city was from meter data over the past 5 years (2018-2022). To check against the usage indicated in the State’s Code R309, the average usage per ERU was calculated from the historical usage. The total average usage over the past 5 years was divided by the average number of ERUs and then converted to gpd/ERU as shown in the calculations below.

$$285,751,000 \text{ gallons} / 926 \text{ ERU} = \mathbf{308,920 \text{ gallon/ERU/year}}$$

$$308,920 \text{ gallon/ERU/year} / 365 \text{ days/year} = \mathbf{846 \text{ gpd/ERU}}$$

Figure II-7 shows a summary of the average usage and historical data that is explained above.

Figure II-7: Hildale & Colorado City Historical Usage Summary

Year	Total Usage (Thousand Gallons)	Number of Connections	Usage per Conn (gpd/conn)	Number of ERUs	Usage per ERU (gpd/ERU)
2018	303,105	863	962	848	979
2019	251,780	763	904	806	856
2020	285,109	799	978	855	914
2021	279,736	855	896	924	829
2022	309,026	1,113	761	1,195	708
5-Year Avg:	285,751	879	900	925	846

The 846 gpd/ERU average usage calculated from the city’s historical usage is significantly higher than the usage that is indicated for use in the state code. This is because the average household size in the communities of Hildale City and Colorado City is larger than the average household size in the rest of the state. Because of the larger usage per ERU, this plan will determine usage demand based on the historical usage instead of the numbers from the state code. This method will result in a more realistic analysis and is the more conservative of the two methods.

The calculations in this report will be based on the historical average usage of **846 gpd/ERU** (0.59 gpm/ERU). It is recommended that future improvements be sized based on this average usage.

F. PEAK DAY DEMAND CULINARY WATER USAGE

Peak Day Demand (PDD) is defined by the Utah Administrative Code as the “anticipated water demand on the day of the highest water consumption”. The state code uses 800 gpd/ERU for a peak day demand of a standard residential unit which is twice the average day demand. Therefore, it can be assumed that the PDD for this plan is double the 846 gpd/ERU average demand calculated above. Doubling the average usage results in a peak demand of **1,692 gpd/ERU** (1.17 gpm/ERU).

G. PEAK INSTANTANEOUS DEMAND CULINARY WATER USAGE

Peak Instantaneous Demand (PID) can be described as the highest demand at any one instance in the system. This can be determined based on hourly usage if such data is available. Where hourly usage data does not exist, which is the case of this study, the State Code uses the following method to calculate the PID:

Indoor Usage:

$$Q_{peak\ indoor} = 10.8 \times N^{0.64}$$

Where N is the number of connections and Q is the flow in gpm

Outdoor Usage:

$$Q_{peak\ outdoor} = N \times Irr. \text{ Acreage} \times Demand\ Factor$$

Where N is the number of connections, Irr. Acreage is the average area that is irrigated throughout the system and the Demand Factor is based on the zone given in Table 510-7 of R309-510 of the Utah Administrative Code.

This calculation results in a PID of **2,446 gpm** for the year 2024. It's important to note that the formula does not take into account the average household size, only the number of connections. The PID is expected to go down as the average household size decreases.

H. CONSERVATION

This plan assumes a conservation rate of 0.5% per year over the planning period. This conservation factor is used to represent any conservation efforts from the city, existing connections, or new connections. This rate also takes into account the decrease in average household size that the communities are currently experiencing. This conservation results in the following demands at the end of the planning window.

- ADD (2043) = 766 gpd/ERU
- PDD (2043) = 1,531 gpd/ERU

The conservation factor is not used for the PID. As mentioned above, the PID is the highest demand on the system at any given moment. Conservation efforts do not have a major impact on the amount of water that could be used at any given moment.

III. WATER SOURCE CAPACITY ANALYSIS

A. EXISTING WATER SOURCE

To analyze source capacity, all available culinary water sources must first be identified. These sources are listed in Figure III-1. The flow capacity numbers were acquired from the HCCUD.

Figure III-1: Hildale and Colorado City Existing Water Sources

Name/#	Flow (CFS)	Flow (gpm)
Wells		
4	0.265	119
8	0.134	60
10	0.189	85
11	0.178	80
17*	0.223	100
19	0.223	100
21	0.446	200
22	0.223	100
24	0.178	80
Academy	0.512	230
Power Plant**	0.000	0
Subtotal	2.571	1154
Springs		
Jans Canyon	0.036	16
Maxwell Canyon	0.143	64
Subtotal	0.178	80
Total Source	2.750	1234

*Well 17 is currently being refurbished and is anticipated to produce 100 gpm once it is finished.

**Power Plant Well can produce 244 gpm but is currently not plumbed to the treatment plant so it is unavailable and not counted as a source.

Listed spring flows are relatively constant. These springs were developed from a horizontal bore into the Navajo sandstone formation. The springs are currently used for Maxwell Park and a fill station. With the springs being used for these non-culinary uses the culinary system does not realize the full 80 gpm associated with the springs. These uses are unmetered, so it is not known what percentage of the spring water goes into the culinary water system.

B. EXISTING REQUIRED WATER SOURCE CAPACITY

The Utah State Code R309-510-7 states that a water system’s source needs to meet “the anticipated water demands on the day of the highest water consumption which is the Peak Day Demand”. The PDD was determined Section II.F as 1,692 gpd/ERU. The source capacity demand for the water system was calculated by multiplying the PDD from Section II.F by the total number of ERUs existing in the system. The results of the analysis are presented in gallons per minute. The results of this analysis are shown in Figure III-2 and the calculation is shown in Appendix B.

Figure III-2: Required Source Capacity (Existing Conditions)

Total Required Source Capacity	1,700 gpm
Total Existing Source Available	1,234 gpm
Existing Source Capacity Deficit	-466 gpm

C. PROJECTED REQUIRED WATER SOURCE CAPACITY

The projected culinary water source capacity required at the end of the planning period is determined from the same factors explained in Section III.B, but the projected number of ERUs is inserted into the calculations instead of the number of existing ERUs. The results of the analysis are shown below in Figure III-3, Figure III-4, and Figure III-5.

Figure III-3: Required Source Capacity (5-year Planning Period)

Total Required Source Capacity	2,440 gpm
Total Existing Source Available	1,234 gpm
Existing Source Capacity Deficit	-1,206 gpm

Figure III-4: Required Source Capacity (10-Year Planning Period)

Total Required Source Capacity	4,190 gpm
Total Existing Source Available	1,234 gpm
Existing Source Capacity Deficit	-2,956 gpm

Figure III-5: Required Source Capacity (20-Year Planning Period)

Total Required Source Capacity	9,397 gpm
Total Existing Source Available	1,234 gpm
Existing Source Capacity Deficit	-8,163 gpm

D. RECOMMENDED WATER SOURCE CAPACITY IMPROVEMENTS

The analysis above shows that the existing available source is not sufficient to accommodate a peak day demand. The historical experience has been that during peak summer months with the system running at full capacity, the city is unable to provide enough water. Without being able to provide enough water to meet system demand the water levels in the storage tanks gradually drop during summer months affecting available fire flow and water pressures. This has caused both communities to enact water restrictions during summer months for the last several years.

Significant source availability improvements are needed now as well as in upcoming years. Hildale City and the Town of Colorado City have performed multiple studies over the years looking at different ways to improve the quantity and quality of available source. These studies, as well as this plan, provided several recommended improvements. This plan incorporates the recommendations from these studies. However, these improvements do not provide enough sources to cover the required source capacity in the planning windows.

In order to increase the available source to meet the projected required source capacity, this plan assumes that a significant number of new wells will need to be drilled. In addition to the recommended improvements from previous studies, this plan recommends additional well fields to be installed at the 0–5-year, 6-10-year, and 11-20-year windows. These well fields are included in the recommendations as 6 single projects with one well field for each community in each of the planning windows. The following assumptions were used in calculating the number of needed wells:

- Each well has a flow of 120 gpm, the average flow of all existing wells.
- The required flow for each planning window's well field is equivalent to the source deficit at the end of each planning period.
- The number of wells required was found by taking the total required flow divided by the average flow per well, then multiplied by the respective percentage to split the number of wells between the two states.

It is recommended that a well siting study be performed to identify the best possible locations to drill new wells. Because locations are not specified for these additional wells, the wells are not shown in the recommended improvements map in Appendix D.

1. 1 TO 5 YEAR IMPROVEMENTS

- Treatment Plant Wells – The quickest available option to help increase source capacity is to drill two additional wells on the Arizona side of the system, one shallow well and one deep well. This portion of Arizona is an open basin and does not require obtaining water rights to drill and use a well. The city is currently working on a study to evaluate the locations of these two wells. The preliminary idea is to drill the wells near the treatment plant. Based on the output of existing wells, it is anticipated that these wells will produce roughly 80 gpm for the shallow well and 120 gpm for the deep well. The well study will help refine these estimated flows.
- 5-Year Arizona Well Field – It is anticipated that this project will comprise of 7 wells producing the needed total of 840 gpm.
- 5-Year Utah Well Field – It is anticipated that this project will comprise of 7 wells producing the needed total of 840 gpm and will require corresponding water rights.

2. 6 TO 10 YEAR IMPROVEMENTS

- 10-Year Arizona Well Field - It is anticipated that this project will comprise of 8 wells producing the needed total of 960 gpm.

- 10-Year Utah Well Field - It is anticipated that this project will comprise of 8 wells producing the needed total of 960 gpm and will require corresponding water rights.

3. 11 TO 20 YEAR IMPROVEMENTS

- Trailhead Well 1 – The city is looking at drilling additional wells in the nearby canyons to the northeast. The water from these canyons would be obtained from different geologic formations than their current wells. The hope is that the water quality is similar to the Jans Canyon and Maxwell Canyon springs. Trailhead Well 1 would be located on city owned property near the Squirrel Canyon Trailhead. This well would provide additional source to the city but primarily will act as a test to determine potential quantity and quality of water. It is estimated that this well could produce 175 gpm. These wells are in Utah and will require water rights to drill and use the well. The city currently has water rights that can apply for a water rights transfer to the location of the proposed well.
- Trailhead Well 2- If the Trailhead Well 1 proves to be a successful route for obtaining additional source, it is recommended that the city continue to pursue this source with an additional well on the city owned land next to the Squirrel Canyon Trailhead. This well and all future wells up the canyon will require obtaining additional water rights. This well is also estimated to produce 175 gpm.
- Hildale Groundwater Project Phase I - If the Trailhead Wells are successful at producing good quality water, this plan recommends that additional wells be drilled in the area northeast of Hildale. These wells would be located on Bureau of Land Management (BLM) property and would require environmental studies and going through BLM's process (such as a SF299 application and Plan of Development) for obtaining right-of-way on BLM land. The city has already begun working through this process with the help of the Washington County Water Conservancy District. Based on the best available information that the city has, it is estimated that this project would produce roughly 350 gpm. The exact location of these wells will be determined through coordination with the city and BLM.
- Hildale Groundwater Project Phase II- This phase involves drilling two additional wells in different location than Phase I but in the same general BLM owned area. Phase II would require the same BLM process and need for additional water rights. This phase is also estimated to produce roughly 350 gpm.
- Hildale Groundwater Project Phase III – This phase is similar to the first two and involves additional wells in the BLM owned area Northeast of Hildale. It is estimated that this phase will produce 175 gpm.
- 20-Year Arizona Well Field - It is anticipated that this project will comprise of 14 wells producing the needed total of 1,680 gpm.
- 20-year Utah Well Field - It is anticipated that this project will comprise of 14 wells producing the needed total of 1,680 gpm and will require corresponding water rights.

These recommended improvements are summarized in Figure III-6. The projects with identified locations are shown in the Recommended Improvements exhibit in Appendix D.

Figure III-6: Summary of Recommended Source Improvements

Name/#	Flow (CFS)	Flow (gpm)	Est. Year Installed
Wells			
Treatment Plan Shallow	0.178	80	2024
Treatment Plant Deep	0.267	120	2024
1-5 Year AZ Well Field	1.872	840	2026
1-5 Year UT Well Field	1.872	840	2026
6-10 Year AZ Well Field	2.139	960	2033
6-10 Year UT Well Field	2.139	960	2033
Trailhead Well 1	0.390	175	2034
Trailhead Well 2	0.390	175	2034
Hildale Groundwater Project PH I	0.780	350	2035
Hildale Groundwater Project PH II	0.780	350	2036
11-20 Year AZ Well Field	3.743	1,680	2039
11-20 Year UT Well Field	3.743	1,680	2039
Hildale Groundwater Project PH III	0.390	175	2040
Total Projected New Source	18.683	8,385	

The estimated schedule for the recommended improvements is based on projected growth and the anticipated project priority. It is recommended that the early projects be pushed forward as much as possible as funding options become available.

E. SOURCE CAPACITY SUMMARY

Figure III-7 and Figure III-8 show the comparison between the available source capacity and the projected required source capacity. The available source capacity in Figure III-8 represents the source capacity available with the implementation of the recommended improvements including the various new wells required in each planning window.

Figure III-7: Projected Source Capacity with Existing Conditions

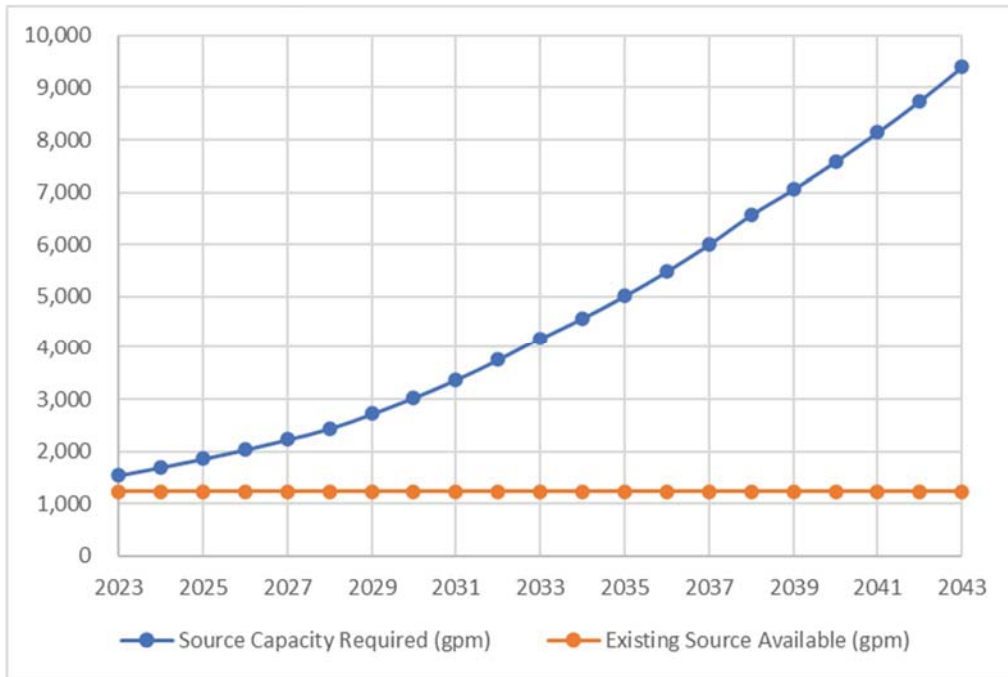
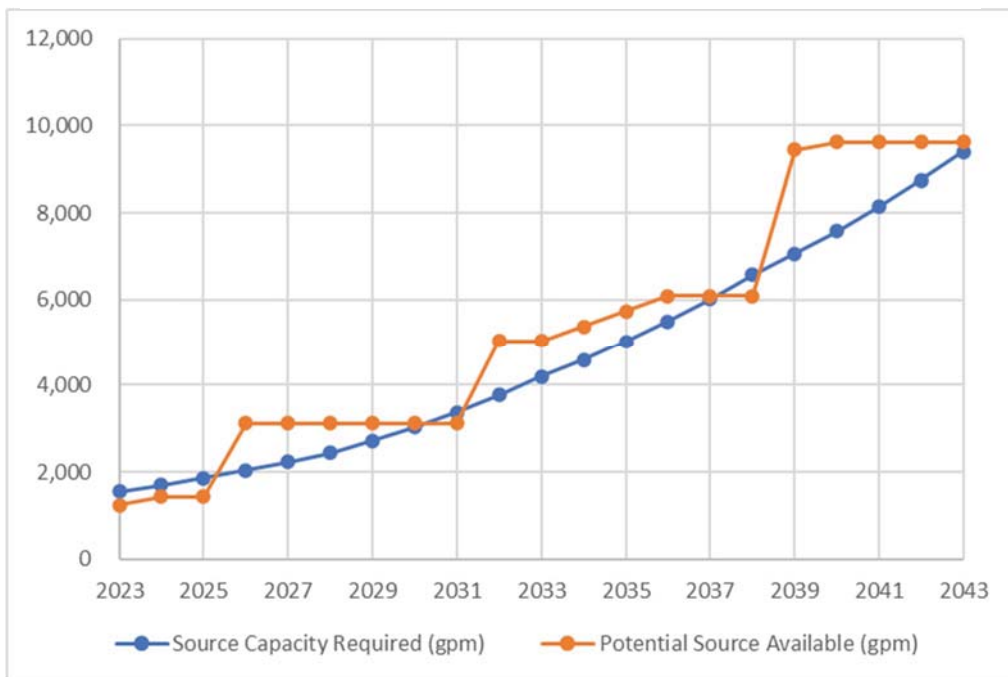


Figure III-8: Projected Source Capacity with Recommended Improvements



IV. WATER STORAGE CAPACITY ANALYSIS

Water storage capacity requirements are found in the State of Utah Public Drinking Water Regulations, R309-510. These regulations require storage for the community's culinary water system to meet one full day's average use requirement for all connections in the community in addition to fire flows for a minimum of two hours.

A. EXISTING WATER STORAGE CAPACITY

There are currently four existing water storage tanks. These tanks are identified in Figure IV-1 below. The Saddle Tank is higher than the other three, and it receives water from the springs. The outlet to the Saddle Tank is near the top of the tank allowing unpressurized outflow. In an emergency, there is a valve that can be opened to utilize the storage in the tank. The other three tanks all have the same high-water elevation and receive water from the wells through the treatment plant.

Figure IV-1: Storage Capacity Summary

Existing Tank	Available Storage (gal)
Saddle Tank	60,000
800,000 Gallon Tank	800,000
600,000 Gallon Tank	600,000
Elm Street Tank	1,000,000
Total Existing Storage Capacity	2,460,000

B. EXISTING REQUIRED WATER STORAGE CAPACITY

As shown in Section II-E, average water usage per ERU also known as the Average Day Demand (ADD) in the water system is 846 gpd/ERU. In general, fire flow requirements are set by the local Fire Authority or are based on building size and type of construction. This plan uses the same minimum fire flow as the previous plans of 1,500 gpm.

The required storage capacity was calculated by multiplying the ADD by the total number of ERUs currently existing in the system and adding the required fire flow of 1,500 gpm for 2 hours. When compared with the system's total storage capacity summarized above, the calculation shows that the city has surplus total storage capacity under current conditions. The results of this analysis are shown in Figure IV-2.

Figure IV-2: Required Storage Capacity (Existing Conditions)

Total Required Storage Capacity	1,404,162 gal
Total Existing Storage Available	2,460,000 gal
Existing Storage Capacity Surplus	1,055,838 gal

C. PROJECTED REQUIRED WATER STORAGE CAPACITY

The projected culinary water storage capacity required at the end of the planning period is determined from the same factors explained in Section IV.B, but the projected number of ERUs is inserted into the calculations instead of the number of existing ERUs. The results of the analysis are shown below in Figure IV-4 and Figure IV-5.

Figure IV-3: Required Storage Capacity (5-Year Planning Window)

Total Required Storage Capacity	1,756,821 gal
Total Existing Storage Available	2,460,000 gal
Existing Storage Capacity Surplus	703,179 gal

Figure IV-4: Required Storage Capacity (10-Year Planning Window)

Total Required Storage Capacity	3,196,811 gal
Total Existing Storage Available	2,460,000 gal
Existing Storage Capacity Deficit	-736,811 gal

Figure IV-5: Required Storage Capacity (20-Year Planning Window)

Total Required Storage Capacity	6,945,872 gal
Total Existing Storage Available	2,460,000 gal
Existing Storage Capacity Deficit	-4,485,872 gal

The current storage capacity is not able to provide enough water for the 10- and 20-year windows. Therefore, improvements will be required in the future.

D. STORAGE CAPACITY CHALLENGES

The storage capacity analysis results show that the city has adequate storage for their current needs. However, with the growth the city is expecting, the required storage will surpass the currently available storage capacity. In addition, there are still some concerns and shortcomings with the existing storage facilities.

- During summer months water operators have expressed concerns that because they are barely able to meet system demands with the wells during the day, and are not able to keep the tanks full. Therefore, the system does not have the full available storage shown in the calculation above.
- The water system consists of a single pressure zone. There are multiple areas around the system within each of the community's limits that are at an elevation higher than the existing tanks can serve and still meet pressure requirements.

E. RECOMMENDED WATER STORAGE CAPACITY IMPROVEMENTS

Improvements need to be made to provide storage for the projected growth. An analysis was done to determine the location of the ERUs at the end of the planning period based on the available information regarding upcoming development mentioned in Section II.B. The system was divided into six regions and the total projected ERUs were placed in their corresponding region. This resulted in the following total projected ERUs per region:

- Northeast: 251 ERUs
- Northwest: 5,305 ERUs
- Central East: 376 ERUs
- Central West: 345 ERUs
- Southeast: 1,630 ERUs
- Southwest: 327 ERUs

The results of this analysis was used to determine the location and size of the recommended storage improvements. Using the minimum sizing requirement of 846 gpd/ERU a storage requirement was calculated for each region. This results in the following approximate storage required for each region:

- Northeast: 215,000 Gallons
- Northwest: 4,500,000 Gallons
- Central East: 320,000 Gallons
- Central West: 300,000 Gallons
- Southeast: 1,400,000 Gallons
- Southwest: 280,000 Gallons

The areas that require the most storage is the Northwest and Southeast. The existing tanks are able to provide the storage required for the other four regions. To reach the required storage the system needs storage in the following locations:

- Northwest: 4,000,000 Gallons
- Southeast: 500,000 Gallons

This additional 4.5 million gallons of storage will reach the states minimum sizing requirements. To provide emergency storage this plan also recommends an additional 1 million gallons of storage. This plan recommends 4 different storage projects be installed within the planning period to provide this additional storage. The recommended projects are as follows:

1. 1 TO 5 YEAR IMPROVEMENTS

- Sandhill Tank 1 – This tank would be constructed above the Elm Street tank to create a higher-pressure zone that would cover the area north of Utah Avenue and east of the highway. This project would include a booster pump to get water to the tank and valving to create the new pressure zone. It is recommended this tank be at least a 2 million gallons.

2. 6 TO 10 YEAR IMPROVEMENTS

- There are no recommended improvements for this planning period.

3. 11 TO 20 YEAR IMPROVEMENTS

- Trailhead Tank - This tank would be installed on the same site as the two wells recommended in Section III-D in the area Squirrel Canyon. This tank would serve two purposes. First, it would collect the water from the proposed Trailhead Wells and the Hildale Groundwater Project wells. The second purpose is to create a higher-pressure zone on the northeast side of Hildale. This pressure zone would serve the existing services and new development up the canyons north of Williams Avenue. This plan recommends the tank capacity to be 500,000 gallons, but the capacity should be reevaluated after the city receives results on how much water can be obtained from Trailhead Well 1.
- South Concrete Tank – In the southeast region of Colorado City, additional storage is required to provide storage for the new developments that are anticipated to be built in the area. It is recommended that the tank be 1,000,000 gallons and installed to be at the same elevation as the existing tanks.
- Sandhill Tank 2 – Recently Hildale City annexed land west of the previous city limits. There are new developments for this area in the preliminary planning stages for this area and it is anticipated that these developments will be started within the planning window. This tank would be used to serve development in this area. This plan uses a recommended storage capacity of 2,000,000 gallons and anticipates that the tank will be located in a similar area and elevation as the Sandhill Tank 1. As these developments progress further along the planning stages it is recommended that the size and location of this tank be reevaluated.

These recommended storage improvements are summarized in Figure IV-5. Appendix D includes an exhibit showing the location of these improvements.

Figure IV-6: Summary of Recommended Storage Improvements

Proposed Tank	Available Storage	Recommended Elev. (ft)	Est. Installation Date
Sandhill Tank 1	2,000,000	5,340	2025
Trailhead Tank	500,000	5,270	2034
South Concrete Tank	1,000,000	5,160	2035
Sandhill 2 Tank	2,000,000	5,340	2038
Total Projected New Storage	5,500,000		

F. STORAGE CAPACITY SUMMARY

Figure IV-7 and Figure IV-8 show the comparison between the available storage capacity and the projected required storage capacity. The available storage capacity in Figure IV-8 represents the storage capacity available with the implementation of the recommended improvements.

Figure IV-7: Projected Storage Capacity with Existing Conditions

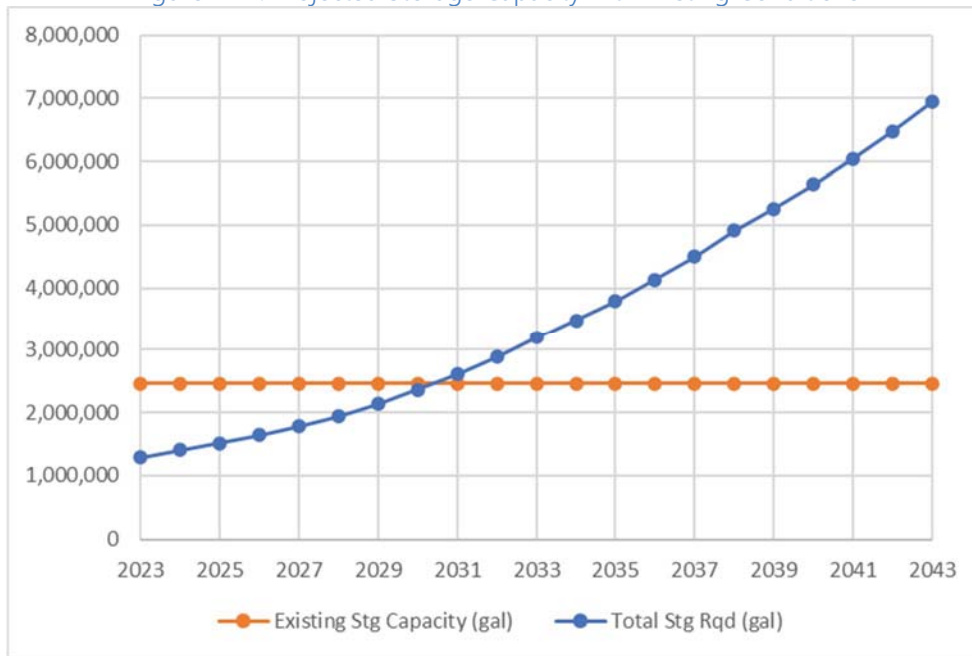
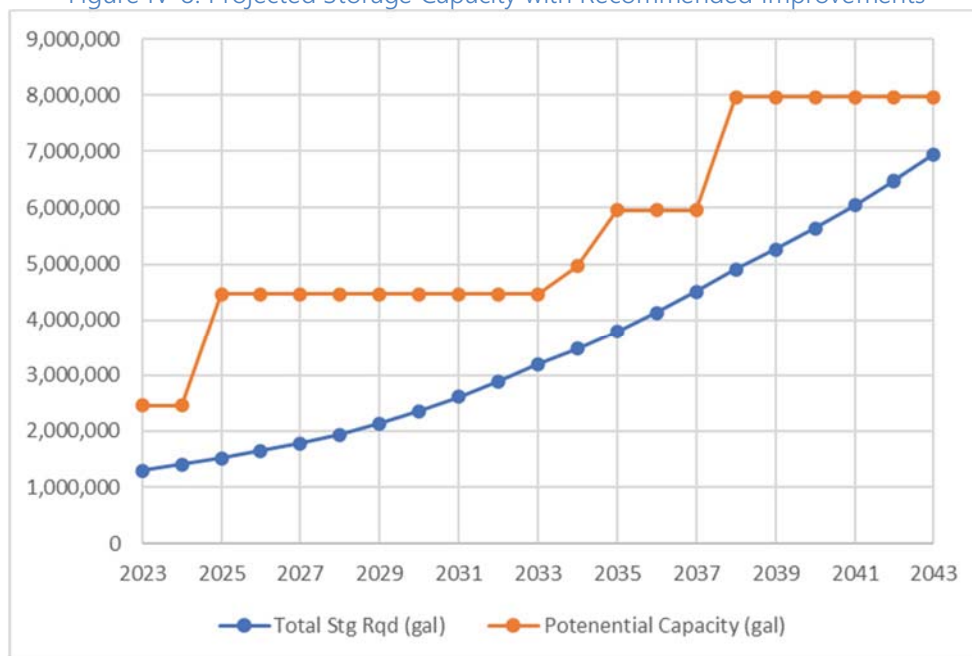


Figure IV-8: Projected Storage Capacity with Recommended Improvements



V. WATER TREATMENT REQUIREMENTS AND ANALYSIS

A. GENERAL REQUIREMENTS

The State of Utah Public Drinking Water Regulations, in accordance with the National Safe Drinking Water Act, have adopted “primary” regulations for the protection of public health and “secondary” regulations related to taste and aesthetics. The regulations recommend that all culinary water sources have provisions for continuous disinfection. Hildale and Colorado City have a culinary water treatment facility to treat the existing wells to meet the State’s requirements.

B. EXISTING TREATMENT FACILITIES

The existing culinary water treatment plant uses a greensand filtration process which includes pretreating the water with potassium permanganate. The plant contains 6 pressure vessels designed to operate in parallel and treat 2,400 gpm. However, based on available data and communicating with system staff, the plant has demonstrated a functional capacity to treat approximately 2,000 gpm. The treatment plant needs to be able to treat more than the PDD so the system doesn’t run out of water. Figure V-1 below shows how the treatment plant capacity compares to the PDD.

Figure V-1: Required Treatment Capacity (Existing Conditions)

Total Required Source Capacity (PDD)	1,700 gpm
Total Existing Treatment Capacity	2,000 gpm
Existing Source Capacity Surplus	300 gpm

C. PROJECTED WATER TREATMENT CAPACITY

As the communities continue to grow, the demands on the system will grow as well. The treatment plants will need to accommodate the increasing PDD. Below is a summary of the projected treatment capacity in relation to future treatment requirements.

Figure V-2: Projected Required Treatment Capacity (5-Year Planning Window)

Total Required Source Capacity (PDD)	2,440 gpm
Total Projected Treatment Capacity	2,000 gpm
Existing Treatment Capacity Deficit	-440 gpm

Figure V-3: Projected Required Treatment Capacity (10-Year Planning Window)

Total Required Source Capacity (PDD)	4,190 gpm
Total Projected Treatment Capacity	2,000 gpm
Existing Treatment Capacity Deficit	-2,190 gpm

Figure V-4: Projected Required Treatment Capacity (20-Year Planning Window)

Total Required Source Capacity (PDD)	9,397 gpm
Total Projected Treatment Capacity	2,000 gpm
Existing Treatment Capacity Deficit	-7,397 gpm

The existing treatment plant will not be able to treat enough water beyond the 5-year planning window. Improvements will need to be made to expand the treatment capacity in the near future.

D. RECOMMENDED WATER TREATMENT FACILITY IMPROVEMENTS

As mentioned before, the treatment plant has a surplus under existing conditions but will need to be improved within the next few years. The following recommendations are made to improve the treatment capacity:

1. 1 TO 5 YEAR IMPROVEMENTS

- Raw Water Transmission Line - The raw water transmission lines which carry water from the wells to the treatment plant should be improved. These lines are old, undersized, and have iron and other mineral deposits adhering to the pipe. It is possible the amount of flow going to the treatment plant is restricted by these deposits. This project is a part of the Mohave County ARPA Water project and it is currently in the design phase. It is recommended that a new 12" transmission line be installed in Richard St. to convey water from the wells south of the treatment plant. It is also recommended that access points be installed that allow water operators to flush and clean out the lines on the new line and on the remaining existing raw water lines.
- Small Treatment Plant – The treatment capacity needs to be increased within the 5-year planning window, so it is recommended that a new treatment plant be constructed. This plant is recommended to treat approximately 1,600 gpm. There is no specific location selected for this plant, however it is recommended that it be built near the Power Plant well so that it can be incorporated into the culinary water system.

2. 6 TO 10 YEAR IMPROVEMENTS

- There are no recommended improvements for this planning period.

3. 11 TO 20 YEAR IMPROVEMENTS

- Additional Treatment Capacity Phase I - With the previous plant implemented, the treatment facilities will again be at a deficit again in the 11-20-year window. An additional 3,000 gpm will need to be added. This can be accomplished by either expanding the previous plant or building an entirely new plant. For planning purposes this report assumes

that a new treatment plant will be constructed. There is no location selected for a new plant, but once a well site study has been completed, it's recommended that the location be central to the additional wells that are constructed.

- Additional Treatment Capacity Phase II – In this planning window, an additional 3,000 gpm is necessary to be able to treat enough water for the system. There is no direct recommendation for this, however some options include improving the existing plant, expanding upon the Phase I Improvements, or constructing a new plant. The EOPC in Appendix C shows the cost of constructing a new plant.

This plan only identifies the deficit in treatment capacity and recommends general projects to make up the deficit. It does not include a detailed analysis or evaluation of treatment options or equipment.

E. TREATMENT CAPACITY SUMMARY

Figure V-5 and Figure V-6 show the comparison between the available treatment capacity and the projected required treatment capacity. The available treatment capacity in Figure V-6 represents the treatment capacity available with the implementation of the recommended improvements.

Figure V-5: Projected Required Treatment Capacity

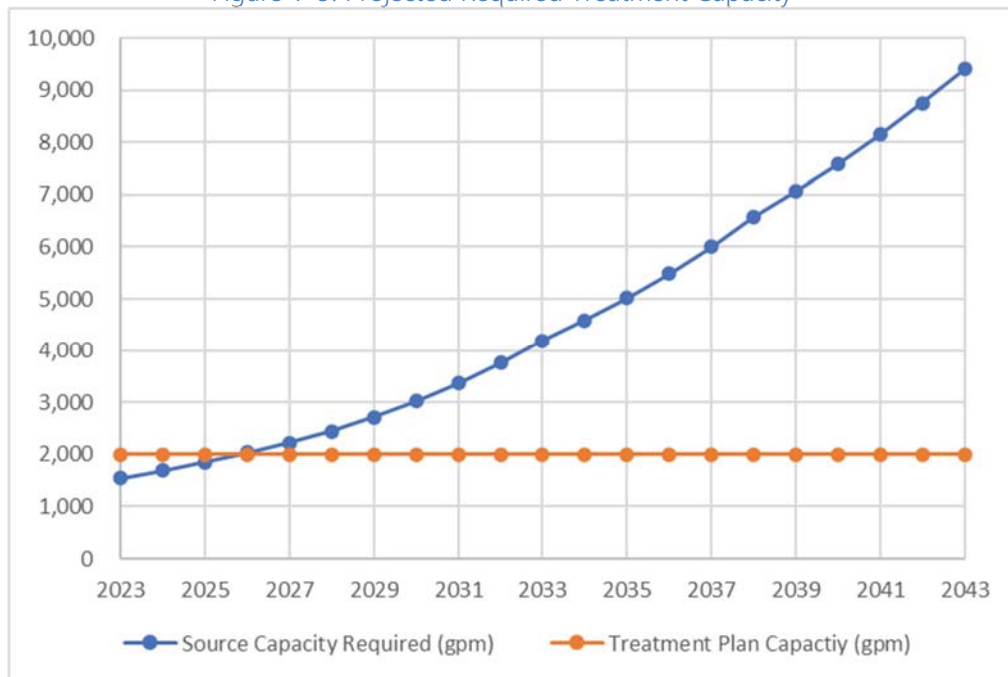
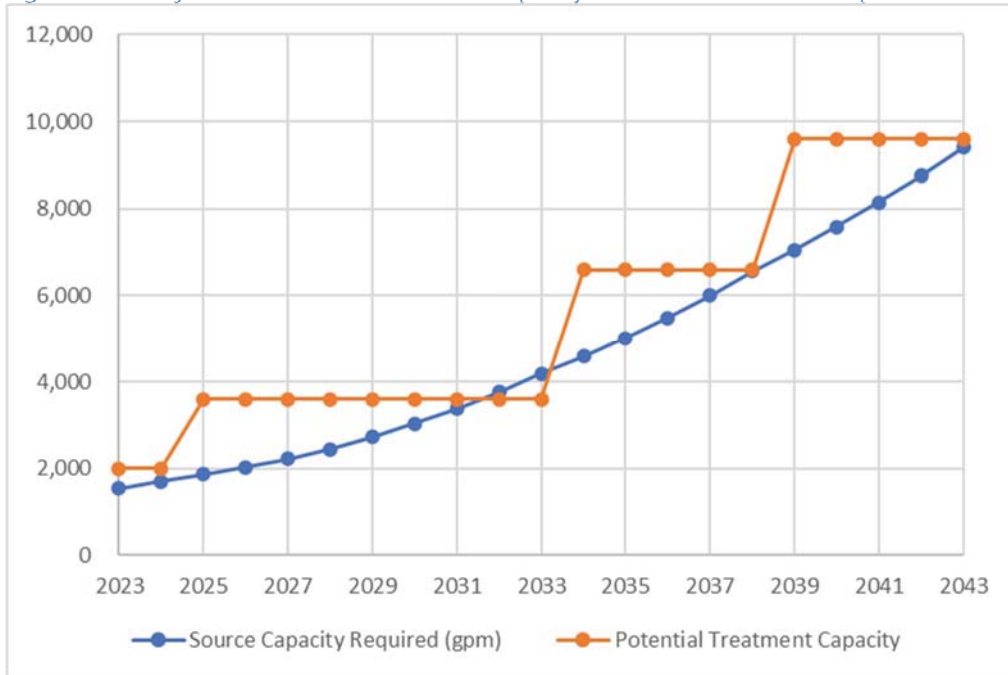


Figure V-6: Projected Available Treatment Capacity with Recommended Improvements



VI. WATER DISTRIBUTION SYSTEM ANALYSIS

The State of Utah Public Water Regulations, R309-105-9, states three pressure conditions which must be met to demonstrate adequate service capacity of a system. These conditions are:

- At least 40 psi must be retained as residual pressure in the distribution system under a Peak Day Demand (PDD).
- At least 30 psi must be retained as residual pressure in the distribution system under Peak Instantaneous Demand (PID)
- At least 20 psi must be retained as residual pressure in the distribution system under PDD plus fire flow conditions.

A. EXISTING DISTRIBUTION SYSTEM ANALYSIS

The existing PDD and PID were calculated in Section II. These flows are shown below:

- PDD – 1,692 gpd/ERU = 1,699 gpm with the existing number of ERUs
- PID – 2,446 gpm

As mentioned in Section IV.B, this report uses a fire flow of 1,500 gpm.

The existing Hildale and Colorado City culinary water distribution system has been modeled using the computer program WaterGEMS by Bentley Systems, Inc. For the existing system network there are areas which provide less than the required 40 psi of pressure for PDD, areas that provide less than 30 psi for PID, and areas that do not provide adequate fire flow. For the most part, the deficiencies in each of these requirements fall in the same areas of the system. Exhibits showing the areas of low pressure and fire flow are found in Appendix D. Below is a summary of these areas:

- Northwest Hildale (area between Utah Avenue and the Elm Street tank) – This area suffers from poor fire flow, lack of hydrants, and low pressure during PDD and PID. Fire flows in this area have been modeled as low as 253 gpm during PDD. This is largely the result of proximity to the elevation of the Elm St. tank. Pressures during PDD and PID are as low as 17 psi and 14 psi respectively.
- Northeast Hildale (area north of Jessop Avenue and west of Carlin Street) – This area suffers from poor fire flow, lack of hydrants, and low pressure during PDD and PID. Fire flows in this area have been modeled as low as 175 gpm during PDD. This is largely the result of proximity in elevation to the tanks, smaller line sizes, and lack of looping. Pressure during PDD and PID are as low as 27 psi and 21 psi respectively.
- East Colorado City (Between Edson Avenue and E Johnson Avenue) – This area suffers from poor fire flow and slightly low pressures during PDD and PID scenarios. Fire Flows

have been modeled as low as 544 gpm during PDD. This is largely due to the elevation of the area being too close to the same elevation of the existing tanks.

B. PROJECTED DISTRIBUTION SYSTEM ANALYSIS

The projected distribution system analysis is performed using the same assumptions as in the existing system analysis, except that the projected number of connections for the 20-year planning window is inserted into the calculations. The results of this calculation for both PDD and PID are shown below:

- PDD – 1,531 gpd/ERU = 9,387 gpm with the projected number of ERUs
- PID – 11,412 gpm

The same water model that was used to examine the existing distribution system was used to analyze the scenarios of the projected system at the end of the 20-year window. With the relatively high projected growth rate, according to the model, the entire system does not meet the requirements of R309-105-9. The recommended improvements in Section V.D and Section VI.D and are intended to keep the system in compliance with the state code at the end of the 20-year planning window.

C. FIRE HYDRANTS

State regulations require all new fire hydrants to be served from 8" diameter or larger pipelines unless it can be proven through the use of modeling that 6" lines are sufficient. There are several existing hydrants in the system that are on 6" or smaller pipes.

Utah state requirements also state that hydrants must be placed so no structure is further than 250 feet away from a hydrant. This means that generally, hydrants should be placed no more than 500 feet away from each other. There are numerous locations throughout the system where additional fire hydrants are needed to meet the required spacing.

D. RECOMMENDED DISTRIBUTION SYSTEM IMPROVEMENTS

From the system deficiencies observed in the analysis, this plan recommends the following improvements:

1. 1 TO 5 YEAR IMPROVEMENTS

- Fire Hydrants – Install additional fire hydrants to meet the minimum required spacing. In placing these new hydrants, some smaller lines will need to be replaced with 8" lines to meet the requirements mentioned above. It is recommended that this project replace all

undersized lines which are not already included in the other improvements. This project would help bring the system into compliance with fire flow requirements.

- Upper Pressure Zone Improvements – Install a new 8" diameter water main on Jessop Avenue and Newell Avenue from Juniper Street to Redwood Street. This will provide looping and help create the pressure zone that will be implemented with the new Sandhill Tank 1. This project involves disconnecting 6 North/South lines in Utah Avenue so all flow going south will flow through one PRV connecting the two pressure zones.
- Northwest Hildale Transmission Line – As mentioned in previous sections, Hildale City has recently annexed new land west of the current city boundary. Currently there is no water infrastructure in place to provide water to this area. A transmission line would need to be installed from the Sandhill 1 tank west to the new development areas. This plan assumes that this would need to be a 16" line from Sandhill Tank 1 to the edge of the new annexation area.
- Canyon Street Line – Install a new 8" water main in Canyon Street from Memorial Street to Newell Avenue. This would provide looping to the northeast Hildale area and help mitigate some of the low pressures and low fire flows. This water main would also act as a trunkline for delivering water from the new wells in the Hildale Groundwater Project and the Trailhead Wells.

2. 6 TO 10 YEAR IMPROVEMENTS

- Hildale Street Line – Install a new 8" water main along Hildale Street from Academy Avenue to Cooke Avenue. This will provide looping to northern Colorado City and provide an additional line crossing the river.

3. 11 TO 20 YEAR IMPROVEMENTS

- Southwest Hildale Transmission Line – As the area west of Hildale City is developed, an additional transmission line should be constructed to provide additional looping to the system. The size and exact location of this line will depend on the timing and location of new development in the west side of the city. Depending on how the area develops, it is possible that this project will be installed in the earlier planning window instead of the Northwest Hildale Transmission Line.
- Transmission Line to Airport – Install a new 12" line extending south on Township Avenue towards the airport. The purpose of this line is to provide water service to potential commercial and industrial developments.

These recommended improvements are summarized in Figure VI-1. Appendix D includes an exhibit showing the location of these improvements.

Figure VI-1: Summary of Recommended Distribution Improvements

Proposed Improvement	Est. Installation Date
Fire Hydrant Project	2024
Upper Pressure Zone Improvements	2026
Canyon Street Line	2028
Northwest Hildale Transmission Line	2028
Hildale Street Line	2030
Southwest Hildale Transmission Line	2040
Transmission Line to Airport	2042

VII. WATER AVAILABILITY

A major concern for the community is long term availability of their water source. With the ongoing drought, this is a concern for most, if not all, communities in the surrounding counties. The following are ideas that the city could investigate to potentially lengthen the availability of water in the area. These ideas are not recommended improvements but starting points for future conversations.

A. WATER CONSERVATION PROGRAM

Implementing a water conservation program is a good way to reduce current water usage and prolong water availability as well as defer the need for some water infrastructure improvements. A conservation program is cheap in that it does not require any construction of infrastructure prior to implementation. Below is a potential list of items that could be included in such a program:

- Provide education on how much water local grasses and trees require and encourage residents to limit outdoor watering to not exceed what is needed.
- Perform a “water audit” on city owned irrigation to determine if outdoor water use could be reduced on city owned property.
- Look into capturing rainwater for outdoor watering. (This would require some investigation on how much water Utah and Arizona will allow to be captured and used)
- Provide incentives for residents to change their existing landscaping to something which requires less water such as Xeriscape.
- Add water conservation language in the Building and Zoning Codes

B. CONSTRUCTION WATER

Currently construction water is typically obtained from fire hydrants. This means that the construction in town typically uses culinary water for construction. This may not be a major usage of the culinary water system, but there may be some inexpensive options to provide non culinary grade water for use as construction water.

The Power Plant Well is currently unavailable for use in the culinary water system. This well could be set up with a connection to provide non culinary grade construction water. While this option does alleviate some strain from the culinary water system, it is still using the same aquifer (source) that the culinary water system is using.

C. RECYCLE BACKWASH WATER AT TREATMENT PLANT

Part of the process of the existing treatment plant includes backwashing the filters occasionally with clean, culinary grade water. Currently the backwash water is sent into the sewer system which is common in many similar plants. It is possible to capture the backwash water, reuse a portion of it, and send it back through the plant. This option saves a minimal amount of water, backwashes do not happen frequently, and they do not use a large amount of water per backwash. However,

this adjustment would save water and should be considered when making future improvements to the treatment facility.

D. SECONDARY WATER SYSTEM

Implementing a secondary water system would be a major benefit to the culinary water system. A secondary system in Hildale and Colorado City would reduce the culinary water use by roughly 40%. This reduction would greatly help with the deficiencies discussed in previous sections of this plan. However, constructing a new water system from the ground up is not cheap, and the added irrigation user rate needed to implement a new system would increase most customer water bills. It is possible to install a complete system in phases or install a small system just for parks or specific high outdoor use areas.

E. WASTEWATER REUSE

Treating wastewater for reuse is an option that would provide more water which is not coming from the same sources as the culinary water system. Treating wastewater sufficiently to be used for human consumption is very expensive and not likely practical for Hildale and Colorado City. However, reuse could be used for things such as construction water or irrigation for parks and agriculture that is not for human consumption. Treatment to this level is cheaper and may provide a cost-effective alternative for the city.

F. INSTALLING AUTOMATIC METERING

Installing instant read smart meters in the system would provide multiple benefits such as providing accurate usage data, acting as a leak detection system, and educating water users on their usage to encourage conservation. Smart metering can record usage to provide actual data for finding the ADD, PDD, and PID.

VIII. SUMMARY OF RECOMMENDED IMPROVEMENTS

A. PRIORITY OF IMPROVEMENTS

Figure VIII-1 shows a summary of the proposed improvements with the estimated cost for the project in today's dollars, the estimated year the improvements will be installed and the estimated cost of the project accounting for inflation. This plan uses an assumed inflation rate of 3%.

Figure VIII-1: Summary of Recommended Improvements

Project	Cost Estimate	Est Year of Installation	Cost Estimate With Inflation
Source Improvements			
Treatment Plant Wells	\$ 1,288,700	2024	\$ 1,327,400
5 Year Arizona Well Field	\$ 3,333,400	2024-2028	\$ 3,642,500
5 Year Utah Well Field	\$ 6,923,700	2024-2028	\$ 7,565,700
10 Year Arizona Well Field	\$ 3,809,600	2029-2033	\$ 4,970,700
10 Year Utah Well Field	\$ 7,912,800	2029-2033	\$ 10,324,400
Trailhead Well 1	\$ 2,445,300	2034	\$ 3,384,900
Trailhead Well 2	\$ 1,713,100	2034	\$ 2,371,300
Hildale Groundwater Project PH I	\$ 3,793,500	2035	\$ 5,408,600
Hildale Groundwater Project PH II	\$ 4,220,100	2036	\$ 6,197,400
Hildale Groundwater Project PH III	\$ 3,105,400	2040	\$ 5,132,800
20 Year Arizona Well Field	\$ 6,666,800	2033-2042	\$ 11,690,300
20 Year Utah Well Field	\$ 13,847,400	2033-2042	\$ 24,281,500
Source Subtotal	\$ 59,059,800		\$ 86,297,500
Storage Improvements			
Sandhill Tank 1	\$ 5,938,100	2025	\$ 6,299,700
Trailhead Tank	\$ 2,875,500	2034	\$ 3,980,400
South Concrete Tank	\$ 4,432,500	2035	\$ 6,319,700
Sandhill Tank 2	\$ 6,475,100	2038	\$ 10,088,000
Storage Subtotal	\$ 19,721,200		\$ 26,687,800
Treatment Improvements			
Raw Water Transmission Line	\$ 1,092,500	2024	\$ 1,125,300
Small Treatment Plant (1,600 gpm)	\$ 5,904,800	2025	\$ 6,264,400
Additional Treatment Capacity PH1	\$ 8,739,000	2034	\$ 12,096,800
Additional Treatment Capacity PH2	\$ 10,312,200	2039	\$ 16,548,100
Treatment Subtotal	\$ 19,051,200		\$ 36,034,600
Distribution Improvements			
Fire Hydrant Project	\$ 1,733,500	2024	\$ 1,785,500
Upper Pressure Zone Improvements	\$ 846,500	2026	\$ 925,000
Canyon St. Line	\$ 388,900	2028	\$ 450,800
Northwest Hildale Transmission Line	\$ 1,977,400	2028	\$ 2,292,300
Hildale St. Line	\$ 454,390	2030	\$ 558,800
Southwest Hildale Transmission Line	\$ 903,800	2040	\$ 1,493,800
Transmission Line to Airport	\$ 2,039,350	2042	\$ 3,576,000
Distribution Subtotal	\$ 8,343,840		\$ 11,082,200
Grand Total	\$ 106,176,040.00		\$ 160,102,100.00

The detailed cost estimate for each project is located in Appendix C.

IX. POSSIBLE FINANCING PLAN

The purpose of this possible finance plan is to show what a funding plan may look like to pay for the projects recommended for 2024. The city may also choose to complete the improvements in separate smaller projects. The projects are assumed to be paid with loan and grant money. It should be noted that agencies may require some amount of self-participation in order to provide funding. This plan assumes a 10% self-participation match.

Figure IX-1 outlines a possible financing plan from the Utah Division of Drinking Water (DDW). This plan assumes 20% of the funding from DDW will be grant and 70% will be loan with the remaining 10% as self-participation. The loan is assumed to be at a 4% interest rate and payback term of 20 years. It is possible a lower interest rate or higher portion of grants will be available. It is recommended that as the city prepares to start this project they contact DDW and other funding agencies such as the Water Infrastructure Finance Authority of Arizona, US Department of Agriculture - Rural Development, or the Utah Community Impact Board to determine what funding is available and where they can get the best financing terms.

The possible financing plan shown in Figure IX-1 results in an annual loan payment of \$224,525. This annual payment along with other O&M expenses for the water system, would require an average monthly charge for culinary water user rates to be \$51.35 per ERU.

The city is looking into adjusting their culinary water impact fees. A majority of the recommended improvements in this plan are fully or partially Impact Fee eligible. Collecting impact fees would help to fund the recommended improvements.

Figure IX-1: Possible Financing plan

HILDALE CITY/TOWN OF COLORADO CITY					
POSSIBLE FINANCING PLAN 2024 projects					
Total Project Cost (Construction + Professional Services):					\$ 4,238,200
Proposed Funding:	% of Proj.	Rate	Term	Principal	Est. Payment
Self Participation	10%			\$ 423,820.00	
DDW Grant	20%			\$ 762,876.00	
DDW Loan	70%	4.00%	20	\$ 3,051,504.00	\$224,535.01
TOTAL PROJECT ANNUAL PAYMENT (2023):					\$224,535.00
O&M EXPENSES: (First Year of New Debt Service Payment)					
Office Expenses and Travel				\$ 38,867.63	
Repairs and Maintenance				\$ 375,825.72	
Utilities				\$ 189,954.97	
Legal and Professional Fees				\$ 68,482.00	
Renewal and Replacement Fund				\$0	
Interest Income				\$ (5,962.58)	
Subtotal Expenses:					\$667,168
EXISTING DEBT SERVICE					
Existing Debt Service					\$0
Subtotal Existing Annual Debt Service:					\$0
GRAND TOTAL EXPENSES:					\$891,703
ANNUAL INCOME					
Impact Fees Expended for 2023 Projects				\$ -	
Total Number Of ERU					1,447
Average Monthly Water User Rate/ERU					\$51.35
Charges for Services, Fees, etc.					\$891,703
GRAND TOTAL INCOME:					\$891,703

X. IMPACT FEE ANALYSIS

This plan constitutes an Impact Fee Facilities Plan (IFFP) and Impact Fee Analysis (IFA) for Hildale City and Infrastructure Improvements Plan for the Town of Colorado City. The Utah Administrative Code allows a community to charge an impact fee to provide funding for the projects required by this growth. The Arizona Administrative Code allows a community to charge a development fee to provide funding for the projects required by this growth. This plan was developed to have the fee comply with both the Utah Administrative Code and the Arizona Revised Statutes and uses the term "impact fee" to refer to development fee in Colorado City as well as the impact fees in Hildale City.

The plan identifies the existing demands on the system as well as future demands which will be placed on the system due to growth. The total cost that is eligible for the impact fee assessment is equal to the portion of a planned project in the planning window that is attributed or caused by growth. The combined costs of these projects are divided by the projected number of new ERUs that will be added to the system. Impact fees can also cover debt service that is incurred by projects that provide excess capacity to be used for growth.

While this master plan uses a planning window of 20 years, the IFFP & IFA use a planning window of 10 years encompassing the start of 2024 to the end of 2033. This shorter window is based on regulations on impact fee collection and use. Impact fees must be encumbered within six years of their receipt according to Utah State Impact Fee law and within 10 years of receipt according to Arizona State Development Fee law. This plan accounts for all incoming fees to be encumbered for eligible projects and debts in the continuous six-year window to satisfy the more stringent law.

A. EXISTING IMPACT FEES

Currently, neither community charges a culinary water Impact Fee.

B. LEVEL OF SERVICE

Impact Fee laws prohibit the use of Impact Fees to increase the level of service beyond that which is currently provided. This requires a determination of the existing level of service upon which to base future improvements. The existing level of service provided by the culinary water system, and which was used to evaluate the system in previous sections of the report, is the Utah State Code minimum sizing requirements.

C. PROPORTIONATE SHARE ANALYSIS

Impact fee laws in Utah and Arizona require that only that portion of the facility, whether existing, new, or future, that is required for growth may be included in the impact fee calculations. A proportionate share analysis must be made of all the facilities to determine a reasonable and logical ratio of cost for each improvement.

1. WATER SOURCE

The analysis in Section III shows that the existing system has a source capacity deficit of 465 gpm. Because this is an existing deficiency, the recommended improvements that fix this deficiency are not impact fee eligible. It is anticipated that the deep and shallow treatment plan wells are projected to provide 200 gpm which is less than the existing deficit of 465 gpm and therefore are considered non-impact fee eligible. The 5-Year well field for Utah and Arizona combined are projected to provide 1,680 gpm. This will bring the capacity above the 465 deficit and provide an additional 1,435 gpm. The additional 1,435 gpm above the existing capacity deficit is additional source capacity that is needed for the projected growth and therefore impact fee eligible. This results in both the 1-5 Year Arizona Well Field and 1-5 Year Utah Well Field projects being 84.3% impact fee eligible.

All of the other wells projects within the 10 year planning period provide additional source that is needed for the projected growth and are considered 100% impact fee eligible. This includes the following projects:

- 10 Year Arizona Well Field
- 10 Year Utah Well Field

2. WATER STORAGE

Only one water storage project is in the 10-year planning window, Sandhill Tank 1. The storage that is provided by this tank is needed for the projected growth. Therefore, the tank is considered 100% impact fee eligible.

3. WATER TREATMENT

The Raw Water Transmission Line is an improvement recommended in the water treatment section. This project helps with the operation and maintenance of the raw water line to the existing treatment plant and does not provide additional treatment capacity. Because this project does not provide any additional treatment capacity needed for the projected growth it is not considered impact fee eligible.

This plan has one recommended improvement to water treatment that will add to the treatment capacity. The Small Treatment Plant provides additional treatment capacity that is needed for the projected growth and is considered 100% impact fee eligible.

4. WATER DISTRIBUTION

A majority of the proposed water distribution projects in the 10-year planning period serve to improve the existing level of service for the system users or provide currently needed fire flows. These projects are not considered impact fee eligible. However, there are a few projects that would extend the service area to allow for growth in areas that currently do not have access to the water system and therefore are unable to be developed. These projects include the following:

- Upper Pressure Zone Improvements. – This project provides increased pressures for the existing units located north of Utah Avenue. This is an area that has historically had issues with low pressures and will fix an existing deficiency. However, this project also allows for the system to extend further north and allow for growth and development in new areas. Because this project fixes existing deficiencies and allows for the extension of the system it is considered 50% impact fee eligible.
- Northwest Hildale Transmission Line – This project extends the system northwest of Hildale and allows for areas to be developed that currently do not have access to the culinary water system. Because this project provides an area for growth to occur it is considered 100% impact fee eligible.

5. FUTURE PLANNING

It is recommended that the capital facilities plan be updated every five (5) years. Since this plan update falls within the 10-year planning period, it is 100% impact fee eligible.

D. ZONAL IMPACT FEES

For impact fees, Hildale and Colorado City each adopt their own impact fee ordinance for their corresponding communities. With the communities being in different states, they each have different Impact Fee laws that need to be followed for each ordinance. The recommended improvements also do not affect each community equally. Zonal impact fees were established with each community being its own zone.

With the projected growth in the 10-year planning window, it is expected there will be an additional 2,417 ERUs added to the system. Based on information currently available regarding future developments, it is anticipated that more of the additional ERUs will be located in Hildale than in Colorado City. For this reason, it is assumed that 55% of the 2,417 ERUs will be in Hildale, resulting in 1,330 ERUs. The remaining 1,088 additional ERUs, or 45%, will be located in Colorado City.

The Impact Fee Analysis will establish the impact fee eligible cost for each of the eligible projects and that cost will be divided amongst both zones based on the percentage of benefit that project provides to each zone.

E. IMPACT FEE ANALYSIS

The total cost that is eligible for the impact fee assessment is equal to the portion of any planned water improvements project that will be constructed in the next 10 years to accommodate new growth. The combined total cost that is due to new growth is divided by the projected number of new ERUs that will be added to the system.

It is recommended that Hildale City and the Town of Colorado City begin charging impact fees per ERU. Figure X-1 shows the impact fee per meter size for Hildale and Figure X-2 shows the impact fee per meter size for Colorado City. Should a lower impact fee be adopted, the remaining construction cost deficit would need to be funded through other means. Appendix E contains the analysis performed to determine the impact fee.

Figure X-1: Maximum Zonal Impact Fee- Hildale

Meter Size	ERUs	Impact Fee
5/8" & 3/4"	1.00	\$ 12,580.00
1"	1.78	\$ 22,364.44
1 1/2"	4.00	\$ 50,320.00
2"	7.11	\$ 89,457.78
3"	16.00	\$ 201,280.00
4"	28.44	\$ 357,831.11
6"	64.00	\$ 805,120.00

Figure X-2: Maximum Zonal Impact Fee- Colorado City

Meter Size	ERUs	Impact Fee
5/8" & 3/4"	1.00	\$ 11,807.00
1"	1.78	\$ 20,990.22
1 1/2"	4.00	\$ 47,228.00
2"	7.11	\$ 83,960.89
3"	16.00	\$ 188,912.00
4"	28.44	\$ 335,843.56
6"	64.00	\$ 755,648.00

It is important to note that these impact fees are for the improvements summarized in this Plan and do not provide for the city to design and build anything beyond the proposed projects. All new additions to the system will need to be considered in the impact fee calculations. Otherwise, the developer should be required to make the improvements.

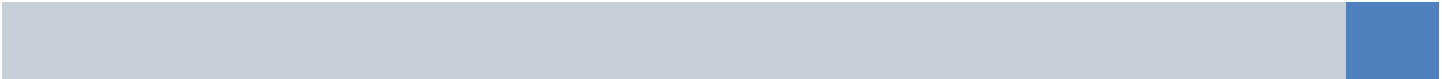
F. IMPACT FEE CERTIFICATION

In general, it is beneficial to update this impact fee facilities plan and analysis at least every five years, or more frequently if drastic growth or changes affect the assumptions and data in this plan. It is assumed that this plan will be updated as recommended.

There are items relating to impact fees that Hildale City and the Town of Colorado City must consider when planning for, collecting, and expending impact fees in accordance with Utah Code 11-36a-101 and Arizona Code 9-463.05.

Staff from each community must understand that impact fees can only be expended for a system improvement that is identified in the Impact Fee Facilities Plan and that is for the specific facility type for which the fee was collected. Impact fees must be expended or encumbered for permissible use within six years of their receipt unless Utah Code 11-36a-602(2)(b) applies. Also, impact fees must have proper accounting (track each fee in and out) in accordance with Utah Code 11-36a-601 and Arizona Code 9-463.05.

In accordance with Utah Code 11-36a-306 a certification of impact fee analysis is in Appendix F.



APPENDIX A

Growth Rate Analysis

Population & Growth Rate

Calendar Year	Est. Growth Rate	Hildale Population	Colorado City Population	Total Population	Hildale Connections	Colorado City Connections	Total Connections	Number of ERUs
2023		3,224	5,358	8,582	435	790	1,224	1,315
2024	10.0%	3,547	5,894	9,440	478	869	1,347	1,446
2025	10.0%	3,901	6,483	10,384	526	956	1,481	1,591
2026	10.0%	4,291	7,132	11,423	578	1,051	1,630	1,750
2027	10.0%	4,720	7,845	12,565	636	1,156	1,792	1,925
2028	10.0%	5,192	8,629	13,822	700	1,272	1,972	2,117
2029	12.0%	5,816	9,665	15,480	784	1,425	2,208	2,371
2030	12.0%	6,513	10,825	17,338	878	1,596	2,473	2,656
2031	12.0%	7,295	12,124	19,419	983	1,787	2,770	2,974
2032	12.0%	8,170	13,578	21,749	1,101	2,001	3,103	3,331
2033	12.0%	9,151	15,208	24,359	1,233	2,242	3,475	3,731
2034	10.0%	10,066	16,729	26,794	1,357	2,466	3,822	4,104
2035	10.0%	11,073	18,401	29,474	1,492	2,712	4,205	4,514
2036	10.0%	12,180	20,241	32,421	1,641	2,984	4,625	4,966
2037	10.0%	13,398	22,266	35,663	1,806	3,282	5,088	5,462
2038	10.0%	14,738	24,492	39,230	1,986	3,610	5,596	6,009
2039	8.0%	15,917	26,452	42,368	2,145	3,899	6,044	6,489
2040	8.0%	17,190	28,568	45,758	2,317	4,211	6,528	7,008
2041	8.0%	18,565	30,853	49,418	2,502	4,548	7,050	7,569
2042	8.0%	20,050	33,321	53,372	2,702	4,912	7,614	8,175
2043	8.0%	21,654	35,987	57,641	2,918	5,305	8,223	8,829